Environment Canada Environnement Canada

EPS 9/RM/1

A Protocol Guide for an Environmental Management System Audit

Canada

ENVIRONMENTAL PROTECTION SERIES

Sample Number:

EPS **3** / **HA** / **1**

Report number with the qualifier EPS 3/HA
Subject Area Code
Report Category
Environmental Protection Series

Categories

1	Regulations/Guidelines/Codes of Practice
2	Problem Assessment and Control Options
3	Research and Technology
4	Literature Reviews
5	Surveys
6	Social, Economic and Environmental Impact Assessments
7	Surveillance
8	Policy Proposals and Statements
9	Manuals

Subjects

AG	Agriculture
AN	Anaerobic Technology
AP	Airborne Pollutants
AT	Aquatic Toxicity
CC	Commercial Chemicals
CE	Consumers and the Environment
CI	Chemical Industries
FA	Federal Activities
FP	Food Processing
HA	Hazardous Wastes
IC	Inorganic Chemicals
MA	Marine Pollutants
MM	Mining and Ore Processing
NR	Northern and Rural Regions
PF	Paper and Fibres
PG	Power Generation
PN	Petroleum and Natural Gas
RA	Refrigeration and Air Conditioning
RM	Reference Methods
SF	Surface Finishing
SP	Oil and Chemical Spills
SRM	Standard Reference Methods
TS	Transportation Systems
TX	Textiles
UP	Urban Pollution
WP	Wood Protection/Preservation

New subjects and codes are introduced as they become necessary. A list of EPS reports may be obtained from Environmental Protection Publications, Environmental Protection Service, Environment Canada, Ottawa, Ontario, K1A 0H3, Canada

A Protocol Guide for an Environmental Management System Audit

National Library of Canada cataloguing in publication data

Main entry under title :

A protocol guide for an environmental management system audit

(Report ; EPS 9/RM/1)
Issued also in French under title : Guide du protocole de vérification des systèmes de gestion de l'environnement.
ISBN 0-662-31019-5
Cat. No. En49-24/1-52E

1. Environmental management -- Handbooks, manuals, etc.
2. Industrial management -- Environmental aspects -- Handbooks, manuals, etc.
3. Environmental management -- Standards.
4. Environmental protection.
I. Canada. Environmental Protection Service.

GE300.P76 2001 658.4'08 C2001-980270-6

© Her Majesty the Queen in Right of Canada (Environment Canada) 2001

Readers' Comments

Comments on the contents of this guide may be addressed to:

Paul Mudroch
Federal Programs Division
Environmental Protection Branch
Environment Canada
49 Camelot Drive
Ottawa, Ontario K1A 0H3
Canada

Review Notice

This guide has been reviewed by members of the Environmental Protection Branch, Environment Canada, and has been approved for publication.

Approval does not necessarily signify that the contents reflect the views and policies of Environment Canada. Mention of trade names or commercial products does not constitute recommendation or endorsement for use.

TABLE OF CONTENTS

Executive Summary **6**
Résumé **7**
Revision History Record **8**

Chapter 1 - Introduction **9**
1.1 Relevant Concepts **9**
1.1.1 Important Definitions 10
1.2 Essential Elements of an EMS **11**
1.3 Objectives of EMS Audit **13**
1.4 Essential Elements of an EMS Audit **13**
1.4.1 Phase One - Planning 14
Logistical Arrangements 14
Audit Team Selection 14
Background Research for an EMS 15
Background Questionnaire 16
Development of EMS Audit Protocols 17
1.4.2 Phase Two – On Site Activities 17
1.4.3 Phase Three – Reporting 17
1.5 Presentation of the Protocol and Related Information **17**

Chapter 2 - Environmental Policy **19**
2.1 What the ISO Standard Requires **19**
2.2 Questionnaire Protocol for Environmental Policy **20**
2.3 Recommended Audit Techniques **21**
2.3.1 Document Review 21
2.3.2 Interviews 22
2.3.3 Observations 24
2.4 Common Exceptions **24**
2.5 Common Observations **24**
2.6 Practical Help **24**

Chapter 3 - Planning – Environmental Aspects **25**
3.1 What the ISO Standard Requires **25**
3.2 Questionnaire Protocol for Planning – Environmental Aspects **26**
3.3 Recommended Audit Techniques **27**
3.3.1 Document Review 28
3.3.2 Interviews 29
3.4 Common Exceptions **31**
3.5 Common Observations **31**
3.6 Practical Help **32**

Chapter 4 - Planning – Legal and Other Requirements **33**
4.1 What the ISO Standard Requires **33**
4.2 Questionnaire Protocol for Planning – Legal and Other Requirements **34**
4.3 Recommended Audit Techniques **35**
4.3.1 Document Review 35
4.3.2 Interviews 36
4.3.3 Observations 37
4.4 Common Exceptions **37**
4.5 Common Observations **37**
4.6 Practical Help **38**

Chapter 5 – Planning – Objectives and Targets **39**
5.1 What the ISO Standard Requires **39**
5.2 Questionnaire Protocol for Planning – Objectives and Targets **40**
5.3 Recommended Audit Techniques **41**
5.3.1 Document Review 42
5.3.2 Interviews 42
5.4 Common Exceptions **43**
5.5 Common Observations **43**
5.6 Practical Help **44**

Chapter 6 – Planning – Environmental Management Programs **45**
6.1 What the ISO Standard Requires **45**
6.2 Questionnaire Protocol for Planning – Environmental Management Programs **46**
6.3 Recommended Audit Techniques **46**
6.3.1 Document Review 47
6.3.2 Interviews 47
6.4 Common Exceptions **49**
6.5 Common Observations **49**
6.6 Practical Help **49**

Chapter 7 – Implementation and Operation – Structure and Responsibility **50**
7.1 What the ISO Standard Requires **50**
7.2 Questionnaire Protocol for Implementation and Operation – Structure and Responsibility **51**
7.3 Recommended Audit Techniques **52**
7.3.1 Document Review 52
7.3.2 Interviews 54
7.4 Common Exceptions **55**
7.5 Common Observations **55**
7.6 Practical Help **56**

Chapter 8 – Implementation and Operation – Training, Awareness and Competence 57
8.1 What the ISO Standard Requires 57
8.2 Questionnaire Protocol for Implementation and Operation – Training, Awareness and Competence 58
8.3 Recommended Audit Techniques 59
8.3.1 Document Review 59
8.3.2 Interviews 60
8.4 Common Exceptions 62
8.5 Common Observations 62
8.6 Practical Help 62

Chapter 9 – Implementation and Operation – Communication 63
9.1 What the ISO Standard Requires 63
9.2 Questionnaire Protocol for Implementation and Operation – Communication 64
9.3 Recommended Audit Techniques 65
9.3.1 Document Review 65
9.3.2 Interviews 66
9.4 Common Exceptions 67
9.5 Common Observations 67
9.6 Practical Help 67

Chapter 10 – Implementation and Operation – Environmental Management System Documentation 68
10.1 What the ISO Standard Requires 68
10.2 Questionnaire Protocol for Implementation and Operation – Environmental Management System Documentation 69
10.3 Recommended Audit Techniques 70
10.3.1 Document Review 70
10.3.2 Interviews 71
10.4 Common Exceptions 71
10.5 Common Observations 71
10.6 Practical Help 71

Chapter 11 – Implementation and Operation – Document Control 72
11.1 What the ISO Standard Requires 72
11.2 Questionnaire Protocol for Implementation and Operation – Document Control 73
11.3 Recommended Audit Techniques 74
11.3.1 Document Review 74
11.3.2 Interviews 75
11.3.3 Observations 75
11.4 Common Exceptions 75
11.5 Common Observations 76

11.6 Practical Help **76**

Chapter 12 – Implementation and Operation – Operational Control **77**
12.1 What the ISO Standard Requires **77**
12.2 Questionnaire Protocol for Implementation and Operation – Operational Control **78**
12.3 Recommended Audit Techniques **78**
12.3.1 Document Review 79
12.3.2 Interviews 80
12.3.3 Observations 80
12.4 Common Exceptions **80**
12.5 Common Observations **81**
12.6 Practical Help **81**

Chapter 13 – Implementation and Operation – Emergency Preparedness and Response **82**
13.1 What the ISO Standard Requires **82**
13.2 Questionnaire Protocol for Implementation and Operation – Emergency Preparedness and Response **83**
13.3 Recommended Audit Techniques **84**
13.3.1 Document Review 84
13.3.2 Interviews 85
13.4 Common Exceptions **86**
13.5 Common Observations **86**
13.6 Practical Help **86**

Chapter 14 – Checking and Corrective Action – Monitoring and Measurement **87**
14.1 What the ISO Standard Requires **87**
14.2 Questionnaire Protocol for Checking and Corrective Action – Monitoring and Measurement **88**
14.3 Recommended Audit Techniques **89**
14.3.1 Document Review 89
14.3.2 Interviews 90
14.4 Common Exceptions **91**
14.5 Common Observations **91**
14.6 Practical Help **91**

Chapter 15 - Checking and Corrective Action – Nonconformance and Corrective and Preventive Action **92**
15.1 What the ISO Standard Requires **92**
15.2 Questionnaire Protocol for Checking and Corrective Action – Nonconformance and Corrective and Preventive Action **93**
15.3 Recommended Audit Techniques **94**
15.3.1 Document Review 94
15.3.2 Interviews 95
15.4 Common Exceptions **96**

15.5 Common Observations **96**
15.6 Practical Help **96**

Chapter 16 - Checking and Corrective Action – Records **97**
16.1 What the ISO Standard Requires **97**
16.2 Questionnaire Protocol for Checking and Corrective Action – Records **98**
16.3 Recommended Audit Techniques **99**
16.3.1 Document Review 99
16.3.2 Interviews 100
16.3.3 Observations 100
16.4 Common Exceptions **101**
16.5 Common Observations **101**
16.6 Practical Help **101**

Chapter 17 - Checking and Corrective Action – Environmental Management System Audit **102**
17.1 What the ISO Standard Requires **102**
17.2 Questionnaire Protocol for Checking and Corrective Action – Environmental Management System Audit **103**
17.3 Recommended Audit Techniques **104**
17.3.1 Document Review 104
17.3.2 Interviews 105
17.4 Common Exceptions **106**
17.5 Common Observations **106**
17.6 Practical Help **106**

Chapter 18 - Management Review **107**
18.1 What the ISO Standard Requires **107**
18.2 Questionnaire Protocol for Management Review **108**
18.3 Recommended Audit Techniques **109**
18.3.1 Document Review 109
18.3.2 Interviews 110
18.4 Common Exceptions **111**
18.5 Common Observations **111**
18.6 Practical Help **111**

Chapter 19 – General Requirements **112**
19.1 What the ISO Standard Requires **112**
19.2 Questionnaire Protocol for General Requirements **112**

Appendix - EMS Protocol **113**

EXECUTIVE SUMMARY

The purpose of this Protocol Guide is to present an audit protocol which can be used to assess an environmental management system (EMS). The protocol is based on the International Standard ISO/DIS 14001– *Environmental Management Systems – Specification with Guidance for Use,* since this ISO Standard addresses those elements of an EMS that can be objectively audited.

The Guide also provides practical help on recommended audit techniques, as well as specific guidance on the particular aspects of an EMS that an Auditor should look for during an EMS audit.

It is important for those charged with assessing the effectiveness of an EMS to be fully aware of what an EMS entails and how it relates to other business systems within the organization.

An EMS is not just a manual containing operating procedures, although that may form part of the EMS. It is not just a training plan for staff with environmental responsibilities, although that may form part of the EMS. It is not just an efficient record-keeping scheme providing easy access to environmental records and data, although that may form part of an EMS. It is all of these things and more. An EMS is a powerful tool used by an organization to keep track and maintain a constant awareness of the interactions that its products and activities have with the environment (both positive and negative), to identify environmental performance goals and objectives, and to achieve and continually improve upon that desired level of environmental performance.

An EMS must be integrated with other management systems, otherwise it will be difficult to maintain. The objectives, targets, required procedures and programs identified in the EMS must be part of routine operations related to the "day to day" activities of the organization. The actions undertaken to satisfy the environmental priorities of the organization must not be, and must not be seen to be, add-ons. The EMS must not be viewed as a feeble attempt to be "green". It must be seen as the consistent and systematic control of procedures and operations that could have a significant impact on the environment.

RÉSUMÉ

Le présent guide a pour but d'introduire un protocole de vérification pouvant servir à l'évaluation de tout système de gestion de l'environnement (SGE). Le protocole repose sur la norme internationale ISO/DIS 14001 – *Environmental Management Systems – Specification with Guidance for Use*, qui aborde les éléments d'un SME pouvant faire l'objet d'une vérification objective.

Le guide fournit également des renseignements pratiques sur les méthodes de vérification recommandées et des conseils précis sur les éléments particuliers d'un SGE auxquels un vérificateur devrait s'attarder lors d'une évaluation de système.

Il est important que les personnes chargées d'évaluer l'efficacité d'un SGE connaissent à fond les éléments du système et comprennent comment ce dernier s'intègre aux autres systèmes fonctionnels de l'organisation.

Un SGE n'est pas qu'un simple manuel décrivant des méthodes d'exploitation, qu'un simple plan de formation à l'intention des employés responsables des questions environnementales ou qu'un simple mécanisme rentable de gestion des dossiers qui facilite l'accès aux données et registres environnementaux — encore que tous ces éléments puissent faire partie du système. Un SGE intègre ces composants et bien d'autres encore. Pour l'organisation, le SGE est un puissant outil qui permet : de surveiller et d'apprécier en tout temps les rapports (positifs ou négatifs) qui existent entre les produits et activités de l'entreprise, d'une part, et l'environnement d'autre part ; de cerner les objectifs et le rendement de l'organisation sur le plan environnemental ; et d'atteindre le niveau escompté de rendement environnemental tout en cherchant à améliorer sans cesse cette performance.

Il est important que le SGE soit intégré aux autres systèmes de gestion, sans quoi son entretien sera ardu. Les objectifs et cibles qu'énonce le SGE, les procédures qu'il impose et les programmes qu'il définit doivent tous faire partie des opérations quotidiennes courantes de l'organisation. Les mesures prises pour répondre aux priorités environnementales ne doivent pas être « plaquées » sur les interventions régulières de l'organisation ou être perçues comme tel. Le SGE ne doit pas être vu comme une piètre tentative d'écologisation, mais plutôt comme un encadrement cohérent et systématique des procédures et opérations, susceptible d'avoir des répercussions appréciables sur l'environnement.

REVISION HISTORY RECORD

Controlled Document Number:
Document Title: A Protocol Guide for an Environmental Management System Audit
Issue date: Monday, August 20, 2001
Version number: 1.0
Reason for Change: Original version
Review date: Original publication
Document Owner: Environment Canada, Federal Programs Division, 49 Camelot Drive, Ontario, K1A 0H3, Canada
Status: Hard Copy (also available in Adobe Acrobat format)

CHAPTER 1 - INTRODUCTION

The purpose of this Protocol Guide is to present an audit protocol which can be used to assess an environmental management system (EMS). The protocol is based on the International Standard ISO/DIS 14001– *Environmental Management Systems – Specification with Guidance for Use*, since this ISO Standard addresses those elements of an EMS that can be objectively audited.

The Guide also provides practical help on recommended audit techniques, as well as specific guidance on the particular evidences of an EMS that an Auditor should look for during an EMS audit.

1.1 RELEVANT CONCEPTS

It is important for those charged with assessing the effectiveness of an EMS to be fully aware of what an EMS entails and how it relates to other business systems within the organization.

An EMS is not just a manual containing operating procedures, although that may form part of the EMS. It is not just a training plan for staff with environmental responsibilities, although that may form part of the EMS. It is not just an efficient record-keeping scheme providing easy access to environmental records and data, although that may form part of an EMS. It is all of these things and more. An EMS is a powerful tool used by an organization to keep track and maintain a constant awareness of the interactions that its products and activities have with the environment (both positive and negative), to identify environmental performance goals and objectives, and to achieve and continually improve upon that desired level of environmental performance.

An EMS must be integrated with other management systems, otherwise it will be difficult to maintain. The objectives, targets, required procedures and programs identified in the EMS must be part of routine operations related to the "day to day" activities of the organization. The actions undertaken to satisfy the environmental priorities of the organization must not be, and must not be seen to be, add-ons. The EMS must not be viewed as a feeble attempt to be "green". It must be seen as the consistent and systematic control of procedures and operations that could have a significant impact on the environment.

Over the years a number of standards have been developed that provide directions on developing effective Environmental Management Systems, and these are listed in the following table.

ISO STANDARD	WHAT IT CONTAINS
ISO 14001	• the requirements for certification/registration and/or self-declaration of an organization's EMS. It contains only those requirements that can be objectively audited for certification or self-declaration purposes
ISO 14004	• information designed to provide assistance to organizations implementing or improving an EMS. It provides more general guidance on a broad range of environmental management system issues
ISO 14010	• guidelines for environmental auditing
ISO 14011	• procedures for auditing of Environmental Management Systems
ISO 14012	• qualification criteria for environmental Auditors

1.1.1 IMPORTANT DEFINITIONS

The following terms are important in the context of an EMS:

Environmental Management system

The ISO **14001** Standard Defines an EMS as:

"That part of the overall management system which includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy".

Continual Improvement

The process of enhancing the EMS to achieve improvements in overall environmental performance in line with the environmental policy. Continual improvement is an **ABSOLUTE** necessity in a fully functional EMS, but does not have to be achieved in all areas simultaneously or every year. However, evidence of continual improvement needs to be demonstrated.

Prevention of Pollution

The use of processes, practices, materials, or products that avoid, reduce, or control pollution, and which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

Environment
The surroundings in which an organization operates including air, water, land, natural resources, flora, fauna, humans, and their interrelation.

Interested Parties
An individual or group concerned with or affected by the environmental performance of your organization. You must have an idea of who these people/groups/stakeholders are and what their concerns are before you can effectively implement your EMS.

Environmental Aspect
An element of an organization's activities, products or services that can interact with the environment.

Environmental Performance
Measurable results of the EMS, related to an organization's control of its environmental aspects, based on its environmental policy, objectives and targets.

Environmental Objective
Overall environmental goal, arising from the environmental policy, that an organization sets itself to achieve, and which is quantified where practicable.

Environmental Target
Detailed performance requirement quantified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives and that need to be set and met in order to achieve those objectives.

Organization
Company, corporation, firm, enterprise or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

Conformance
Conformance with regulated requirements. Commitment to conformance is an **ABSOLUTE** necessity in a fully functional EMS.

1.2 Essential Elements of an EMS

In the following description, it is understood that General Requirements (which states: "The organization shall establish and maintain an environmental management system, the requirements of which are described in the whole of clause 4") is the first section of the published ISO standard, but will not be discussed here.

1. The second element of an EMS is the **environmental policy**. There are a number of important attributes that an acceptable environmental policy should have, and these are specified in the ISO Standard. The policy should be defined by Top Management at the facility and have their support and commitment. At a minimum, the policy should commit the facility to conformance with environmental laws, prevention of pollution, continual improvement, provide the framework for objective and target setting and review.

2. The third element of an EMS is **Planning**. According to the ISO Standard, the Planning element of an EMS should identify those aspects of the organization's operations that could have an impact on the environment. It should also identify all the pertinent environmental legislation with which the organization must comply, as well as the environmental objectives the organization is set for itself (e.g. 100% conformance with environmental regulations). Planning activities will also establish a program for achieving those objectives, in which responsibilities for achieving the objectives are assigned and the time frame in which to achieve them is established.

3. The fourth element of an EMS is **Implementation and Operation**. The ISO Standard identifies the following as key components of this element:
    - Structure and Responsibility – involves a definition and communication of roles and responsibilities, and the provision of resources to implement the various elements of the EMS.
    - Training, Awareness and Competence – involves an identification of training needs and the provision of appropriate training for employees; measures to heighten environmental awareness among facility personnel, the importance of environmental protection and conservation, and the consequences of any departures from the organization's environmental standards.
    - Communication – involves the establishment of procedures for internal communication within the facility, and receiving, documenting and responding to relevant communications from external parties.
    - Environmental Management System Documentation – involves the establishment of an internal system (either paper or electronic) to describe the core elements of the EMS and their interaction and where the related documentation is kept.
    - Document Control – involves the establishment and maintenance of procedures for controlling documentation relating to environmental management in order to ensure documents can be easily accessed, are periodically reviewed, and are current.
    - Operational Control – involves the establishment of standard operating procedures related to any operation and/or activity that could result in environmental impacts. The EMS will contain documented procedures to ensure that particular operations are consistently carried out in a manner that complies with company requirements. For example, the procedures for transferring fuel from a delivery truck to a heating oil tank could be specified

to ensure they comply with the applicable regulations and to ensure there is no product spillage during the operation.

- Emergency Preparedness and Response – involves the establishment of procedures to prevent and respond to environmental emergency situations, and the periodic testing of these procedures, where practicable.

4. The fifth element of an EMS is **Checking and Corrective Action**. The ISO Standard requires an EMS to contain documented procedures to monitor and measure environmental performance. Monitoring should include the accurate recording of information, relevant operational controls, and a measure of how the organization is conforming to the stated objectives and targets. The ISO Standard also requires the organization to develop and include in its EMS procedures for investigating and handling cases of non-conformance. There also has to be a process for maintaining environmental records such as training records, audit reports and internal environmental reviews, as well as an established program for auditing the EMS.

5. The sixth component of an EMS is **Management Review**. The ISO Standard requires a process to be in place for top management to periodically review the EMS to ensure it is continuing to serve its intended purpose, and that it is still adequate and functioning to improve environmental performance. The Standard also requires the management review to be documented.

1.3 Objectives of an EMS Audit

The common objectives of an Environmental Management System audit are:

1. To determine conformance - Managers may want to know how closely their EMS conforms to the ISO Standard.
2. To assess implementation - Management may also be interested in whether or not the EMS that has been developed for their facility is being properly implemented.
3. To identify areas for improvement - In some cases, managers commission an audit of an EMS for the express purpose of identifying areas where improvements should be made. In this situation, the environmental Auditor will be called upon to make recommendations in the audit report, instead of identifying the audit findings only.
4. To evaluate the EMS of others - In situations where an organization has a fully functioning EMS, it may specify that its suppliers and/or contractors have fully functioning EMS as well. In this case, an EMS audit may be commissioned by one organization for the purpose of determining how potential suppliers and/or partners are complying with EMS standards.
5. To obtain registration/recognition (third-party).

1.4 Essential Elements of an EMS Audit

An Audit of an Environmental Management System encompasses three distinct phases:

- Phase One - Planning

- Phase Two - On Site Activities
- Phase Three – Reporting

1.4.1 PHASE ONE - PLANNING

Prior to conducting an EMS audit, several Planning activities have to be undertaken by the Auditor. These include:

- Administrative Activities
  - Making logistical arrangements
  - Selecting an audit team
  - Conducting background research
- Operational Activities
  - Developing a background questionnaire
  - Reviewing, evaluating and assessing information
- Development of audit protocols

Logistical Arrangements

Depending on whether the Auditor is conducting an in-house audit as an independent staff member or has been retained as an outside consultant to conduct an independent audit of a facility, convenient dates and times have to be arranged with the management at the facility to be audited.

An audit is usually a disruptive undertaking, so it is imperative that the facility personnel be given the opportunity to select a time that is least disruptive to their daily responsibilities. This is why an Auditor should give sufficient lead-time (anywhere from one to six months depending on the scope of the audit and the complexity of the facility to be audited) to the audited party.

Audit Team Selection

In some cases an audit team is not required. The audit team leader in those cases may be the entire team. In other cases, however, due to the nature of the facility being audited, an audit team will be needed. The lead Auditor then has the specific responsibility of selecting the team members. In doing so, the lead Auditor will assess important areas of professional expertise and personal attributes in prospective team members. Some of these are described below.

A Knowledge of the Regulations

Since regulatory conformance is an integral component of an Environmental Management System, a person with knowledge of the applicable environmental regulations would be an asset on an EMS audit team.

A Knowledge of Facility Operations

It is a definite asset if one team member has knowledge of the operation of the facility or organization being audited (i.e. if s/he understands the processes carried out). That team member will be better able to interact with the facility personnel and determine if

particular operations are being carried out in the most environmentally acceptable manner.

Expertise in Environmental Auditing
Obviously, at least one member of the team must have specific expertise and experience in the principles and practices of environmental auditing.

Expertise in Environmental Management Systems
This member would have knowledge of the systems that should be in place to ensure that environmental priorities are adequately managed, and would be able to provide expert analysis on this topic for the team. This person should also have knowledge of the ISO 14001 and 14004 Standards.

Experience
The experience that the audit team members must have depends mainly on the scope of the audit.

Training
It is imperative that regardless of the scope of the audit, the Auditors be properly trained in environmental auditing techniques. This training can be accomplished prior to the audit, or can be done on site during the audit, provided there is sufficient time and a fully trained person is able to coach the less experienced Auditors through the process.

Independence
An environmental Auditor has to have an independent view, free from bias and the promise of any rewards (beyond what the Auditor is being paid to conduct the audit).

Personal Attributes
In order to be effective, an Auditor has to possess certain personal attributes that include exemplary oral and written communication skills, strong interpersonal abilities, objectivity, efficient personal organization, sound judgment, and sensitivity to local cultures.

Background Research for an EMS
In conducting background research for an EMS, the Auditor will review certain information and documentation. This could include:

- a gap analysis
- previous audit reports
- the ISO 14001 Standard
- in-house policies and standards
- the EMS manual
- other documents (e.g. training plans, Emergency Plans, etc.)

A Gap Analysis
Some organizations which already have some elements of environmental management control undertake what is commonly referred to as a "gap analysis" to determine what they have to do to comply with the ISO Standard.
Gap analyses are site specific, and could provide significant insights into identified deficiencies and measures to address those deficiencies. Equally important, it could indicate where the Auditor should focus attention during the audit.

Previous Audit Reports
As with other environmental audits, a review of previous audit reports during the Planning phase can provide the Auditor with significant insights into the strengths and weaknesses of the environmental management system in a particular organization.

The ISO 14001 Standard
In order to evaluate conformance with the ISO 14001 Standard, the Auditor will have to know the requirements that are contained in the Standard. It is therefore important for Auditors to have a working knowledge/been trained to read and understand the ISO Standard during the Planning Phase of an EMS audit.

In-house Policies and Standards
Relevant in-house policies and standards that relate to environmental management practices should also be accessed and reviewed by the Auditor during the Planning Phase of the Audit.

The EMS Manual
The EMS Manual should be reviewed during the Planning Phase of an EMS Audit. This will give the Auditor an idea of how the organization manages its environmental issues, and the extent to which it has documented its commitment to, and procedures for, environmental protection.

Other Documents
Other relevant documents could be reviewed during the Planning Phase of the Audit. These include training plans for personnel involved in environmental activities at the facility, the Conformance Manual, and the facility Environmental Emergency Prevention, Preparedness and Response Plan.

Background Questionnaire
If possible, before any on-site work is undertaken in an EMS audit, the Auditor should prepare and forward a Background Questionnaire to be completed by facility personnel. The Background Questionnaire for an EMS audit should focus on the following:

- responsibilities of personnel
- environmental policies and procedures
- document controls
- communication
- training

The responsibilities of the facility personnel relate to conformance with environmental regulations in certain functional areas (e.g. air and water pollution control, spill response, etc.); environmental policies and procedures in place, and documentation, communication and training systems at the facility.

Development of EMS Audit Protocols

As previously noted, the development of an Audit Protocol for an EMS audit should focus on the requirements contained in the ISO 14001 Standard, since these are the specifications that the ISO has determined may be objectively audited.

Generally there will be a measure of subjectivity involved, since the ISO Standard is not as prescriptive as some of the other audit criteria with which Auditors may be familiar. There are also several different types of protocols that can be used to evaluate an EMS. Regardless of the type of protocol the Auditor chooses to use, however, it must be designed to determine whether the EMS elements address all the issues specified in the ISO Standard.

1.4.2 Phase Two – On Site Activities

An Auditor may undertake a number of tasks at a facility being audited. These include:

- Reviewing Background Materials, if not done during the planning phase
- Conducting an Opening Meeting
- Participating in a Preliminary Site Tour
- Interviewing Personnel
- Assessing and Reviewing Appropriate Documents
- Observing Procedures and Activities
- Conducting an Exit Meeting

1.4.3 Phase Three – Reporting

The final phase of an EMS audit involves the preparation of an Audit Report. The Audit Report should be concisely written and accurately present all of the audit findings. It should be prepared in a timely manner and submitted to the facility personnel as soon as possible after the completion of the audit.

1.5 Presentation of the Protocol and Related Information

The Protocol that has been developed and that is presented in this Guide is a Questionnaire-type Protocol, which is commonly used for EMS applications. It includes questions relating to every aspect of the ISO 14001 standard, as well as questions related to best management practices in a fully functional EMS.

Each of the following chapters presents important and practical information on the specifics of an EMS audit in a user-friendly manner. Each chapter contains the following subsections:

- a listing of what the ISO standard requires for each EMS element,

- the Protocol questions presented in a Questionnaire format, with guidance on which questions relate to possible **exceptions** (nonconformance with a requirement specified in the ISO 14001 Standard) and **observations** (nonconformance with best management practices). The identification of observations is an important component of an EMS audit since it helps an organization to improve its environmental management,
- the recommended audit techniques to facilitate ease of collection of appropriate audit evidence,
- suggested documents to review in the course of the audit,
- suggested personnel to interview, questions to be asked to assess conformance, and what to look for in responses,
- recommended visual observations to make to aid in evaluating conformance,
- the common exceptions and observations which can be expected in each EMS element
- practical hints and help to aid in effective auditing of each element.

The Protocol is presented in a three-column format similar to one which could be used in an actual audit. Column One contains the protocol questions. Column Two is for concise Notes that the Lead Auditor may make on each of the Protocol steps (e.g. the auditor to whom this portion of the protocol was assigned, or other concise information relevant to that step. Note, however, that most information that is acquired will be written in Working Papers). Column Three contains the Working Paper Reference (noted as WPR in the column) and would be used by the Lead Auditor to note the exact location in the Working Papers where evidence relating to each of the Protocol questions is documented. (Note that Working Papers are the auditor's personal notes recorded during the course of the audit activities). Also note that in some cases the Lead Auditor may represent the entire audit team.

CHAPTER 2 - ENVIRONMENTAL POLICY

2.1 WHAT THE ISO STANDARD REQUIRES

For an **Environmental Policy**, the ISO Standard specifies that:

- The policy must be appropriate to the nature of the facility, its operations, and its potential for affecting the environment;
- The policy must contain a commitment to prevention of pollution and to continually improving environmental management of the facility's activities;
- The policy must include a commitment to conformance with environmental laws and other relevant environmental requirements;
- The policy must be documented and communicated to all employees;
- The policy must provide the framework for setting and reviewing environmental objectives within the company; and,
- The policy must be available to the public.

There are other elements that **may** be included in a company's environmental policy. These include a dedication of the resources necessary to implement the policy; a plan to periodically review the policy; a promise to share environmental experiences; a commitment to sustainable development, and an incorporation of environmental life cycle analysis into corporate decisions.

2.2 QUESTIONNAIRE PROTOCOL FOR ENVIRONMENTAL POLICY

ENVIRONMENTAL POLICY (ISO SECTION 4.2)	Notes	WPR
1. **Does the facility have an environmental policy that is relevant to its activities**? 2. **Is it written?** (If yes, review) 3. Does the policy reflect facility's values and guiding principles? 4. Has Top Management approved the policy? 5. Has facility management identified, approved and given authority to someone to oversee and implement the policy? 6. **Does the policy guide the setting of environmental objectives and targets**? 7. Does the policy guide facility toward appropriate technology and management practices? 8. **In the policy, is there a commitment to:** • **Continual improvement;** • **Prevention of pollution;** • Monitoring; • **Meeting or exceeding legal requirements;** • **Meeting or exceeding other environmental requirements;** • Consideration of the expectations of interested parties. 9. Is the policy signed by the Director of facility? 10. Are resources necessary to implement the policy identified and committed? (How?) 11. Is the policy dated? 12. Does the policy contain a current version number? 13. **Is the policy effectively communicated to staff**? (How?) 14. **Is the policy available to the public**? 15. Is the policy effectively communicated to the public? (How?) 16. Is the policy regularly reviewed? (by whom?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

2.3 Recommended Audit Techniques

An audit of the organization's **Environmental Policy** would entail:

1. A document review;
2. Interviews;
3. Visual observations.

Practical tips on each of these techniques are presented in the following tables.

2.3.1 Document Review

Document to Review	What to Look For	Relevance to Audit	Who to Ask
The Environmental Policy	Does it contain the required elements? Is it signed? Is it dated?	Facilitates an assessment of conformance with the Standard.	Pre-Audit
Management Review Meeting Minutes	Is the policy periodically discussed? Are possible policy amendments discussed? Is the continuing relevance of the policy questioned?	Allows you to determine whether the policy is periodically reviewed by Top Management and whether the policy continues to meet the requirements of the organization.	Top Management
Staff safety committee meetings	Is the policy periodically discussed?	Allows you to determine whether the policy is communicated to staff.	Health and Safety Coordinator
WEB Site	Is the policy posted?	Allows you to determine whether the policy is made available to the public.	Any employee
EMS Procedure Relating to Environmental Policy	Does the procedure identify how the policy is to be periodically reviewed?	Facilitates an evaluation of the policy review / update procedures.	Pre-Audit.

2.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Top Management/ Managers	Are you aware of the environmental policy for this organization?	You should expect that all of the Top Management at the facility will be fully aware of the policy.
	To what does the policy commit the organization?	Top Managers should indicate that the policy commits the organization to conformance with environmental requirements, preventing pollution where possible, enhancing environmental performance and seeking continual improvement.
	How did you incorporate the views of interested parties into your policy?	Top Managers may have solicited comments from stakeholders on the policy; they may have consulted interest groups on the policy commitments; they may have discussed the policy with environmental regulatory agencies.
	Does Top Management demonstrate a full commitment to the policy – how?	Top Management should be able to provide examples of their support for the policy (e.g. provision of resources, professional interest, etc.).
Management Representative	Are you aware of the environmental policy?	The Management Representative should be fully aware of the policy and its contents.
	Does Top Management demonstrate a full commitment to the policy – how?	The Management Representative should be able to provide examples of management support for the policy (e.g. provision of resources, professional interest, etc.).

Who to Interview	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
	Does the policy provide a framework for setting and reviewing environmental objectives and targets? How?	The Management Representative should be able to explain how the policy provides direction to the more specific aspects of the operations at the facility which have environmental consequences.
Staff	Are you aware of the environmental policy?	Staff should be fully aware of the existence of the policy and its contents.
	To what does the policy commit you as an individual?	Staff should indicate that the policy commits them to undertaking their duties in a way, which is respectful of the environment; that the organization provides the resources to enable them to do their jobs in an environmentally friendly manner; that there are penalties for nonconformance with environmental requirements.
	To what does the policy commit the organization?	Staff should indicate that the policy commits the organization to complying with environmental requirements, to prevention of pollution and to continual improvement.

2.3.3 *Visual Observations*

What to Observe	Specific Observations	Relevance to Audit
Places where policy is posted	Is the policy posted in prominent places around the facility (e.g. lunch rooms, visitor areas, boardrooms)?	To ensure policy is available to staff and public
Condition of policy posters	Are the posters colored or otherwise marked so they stand out on a bulletin board? Are the policy posters large enough to be noticed?	Effectiveness of communicating policy to staff and public

2.4 Common Exceptions

Commonly noted exceptions in the audit of the environmental policy are:

1. Policy does not contain a commitment to prevention of pollution;
2. Policy not communicated to all employees.

2.5 Common Observations

Commonly noted observations in the audit of the environmental policy are:

1. Policy not dated;
2. Policy not signed;
3. Policy not made available to the public.

2.6 Practical Help

1. Note that the ISO Standard does not require that Top Management sign the policy. However, this is one significant way in which the Top Management at a facility can indicate their support for the policy.
2. This section (4.2) of the ISO Standard does not require that the policy be dated and identified with a current version number. However, Section 4.4.5 – Document Control, does require that current versions of relevant documents (including the environmental policy) be available. It is advisable then at this point to determine if the policy conforms to that requirement.

CHAPTER 3 - PLANNING – ENVIRONMENTAL ASPECTS

3.1 WHAT THE ISO STANDARD REQUIRES

For the **Environmental Aspects** element in the Planning phase of an EMS, the ISO Standard requires that:

- A procedure must be established to identify environmental aspects of activities, products, or services over which an organization can be expected to have an influence;
- The procedure should include a mechanism to determine which of the aspects could have a significant impact on the environment;
- The organization must consider these significant impacts when setting its environmental objectives;
- The information on environmental aspects and impacts must be kept up-to-date.

There are other considerations that are important in determining environmental aspects and impacts that you, the EMS Auditor, must be aware of. In determining its environmental aspects an organization should consider (where relevant) emissions to air; releases to water; waste management; land contamination; use of raw materials & natural resources, and other local environmental/community issues. Also, actual & potential, positive & negative impacts associated with each environmental aspect, of normal and abnormal operations, should be identified prior to evaluating the significance of each of these impacts.

In auditing this element of the EMS, you should be aware that careful consideration should have been given to all relevant activities, aspects and impacts, many of which might not be significant. It is only after this careful consideration of all aspects, however, that the determination of environmental significance can be effectively made.

3.2 Questionnaire Protocol for Planning – Environmental Aspects

Environmental Aspects (ISO Reference S. 4.3.1)	Notes	WPR
1. **Has the facility established a procedure to identify the environmental aspects of its activities, products and services that it can control and over which it has an influence?** 2. Does this process include a listing of activities, products and services that may affect the environment? 3. Does the list include: • hazardous material management, • solid waste management, • hazardous waste management, • effluent discharges related to power generation, • sanitary sewage discharges, • landfills, • transportation, • fugitive emissions, • air emissions from stacks, • noise emissions, • odours from the plant , • environmental emergencies, and, • others (specify). 4. Does the process include a listing of all existing monitoring programs associated with each of the activities, products and/or services that may affect the environment? 5. Are these monitoring programs adequate to identify the environmental impacts of the activities, products and/or services? 6. Have these impacts been quantified and documented in terms of: • the scale of the impact, • the severity of the impact, • the probability of occurrence • the duration of impact. 7. **Does the facility have a definition of what is "significant" in terms of environmental impact?** (What is it and is it documented?)		

	Notes	WPR
8. What are the significant environmental impacts associated with the activities, products and/or services? 9. Are these significant impacts documented? (If yes, review) 10. Does the process identify potential upset/spill/emergency conditions associated with the activities, products and/or services? 11. Are there reports/evaluations that describe impacts of these upset conditions? 12. Have these impacts been quantified and documented in terms of: • the scale of the impact • the severity of the impact • the probability of occurrence • the duration of impact **14. Is this process adequate to identify the environmental aspects of the facility operation and the evaluation of potential environmental impacts?** **15. Has the facility developed a process to ensure that the aspects related to any potentially significant environmental impacts are considered in setting its environmental objectives?** **16. Is there a process for keeping all of this information on environmental aspects and impacts current?** 17. Are all these procedures documented? (If yes, review)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

3.3 Recommended Audit Techniques

An audit of the organization's evaluation and documentation of **Environmental Aspects** would entail:

1. Document review.
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

3.3.1 Document Review

Document to Review	What to Look For	Why
Initial Environmental Review Report	Does it contain a listing of operations that could have environmental impacts? Are these operations included in the evaluation of activities and aspects?	Facilitates an assessment of the adequacy of the Aspects Identification/Impact Significance procedure.
Environmental Permits, Licenses and Operating Conditions	Does it identify operations requiring a permit from a regulatory agency? Are these operations included in the evaluation of activities and aspects?	Facilitates an assessment of the adequacy of the Aspects Identification/Impact Significance procedure.
EMS Aspects Identification/Impact Significance Procedure	Does the procedure include a listing of activities, products and services; an identification of environmental aspects; a procedure for determining significance including criteria used; an assessment and listing of significance?	Facilitates an assessment of conformance with the Standard.
	Does the procedure include a provision for periodically reassessing these items?	Facilitates an assessment of conformance with the Standard.
	Does the procedure include an evaluation of normal operating conditions, upset conditions (start up/shut down) and emergency situations?	Facilitates an assessment of the adequacy of the Aspects Identification/Impact Significance procedure.
Documentation on aspects; impacts and evaluation of significance	Does the document provide a complete listing of activities, related aspects and how the procedure for assessing significance was carried out?	Even though the Standard does not require this information to be documented, this is the easiest way to determine if the information is kept up-to-date.

DOCUMENT TO REVIEW	WHAT TO LOOK FOR	WHY
Record of Public Complaints	Does it include an identification of operations that have caused concern in the community? Are these operations included in the evaluation of activities and aspects?	Facilitates an assessment of the adequacy of the Aspects Identification/Impact Significance procedure.
Record of Environmental Emergency Events	Does it include a listing of operations where spills and other emergency events have occurred? Are these operations included in the evaluation of activities and aspects?	Facilitates an assessment of the adequacy of the Aspects Identification/Impact Significance procedure.

3.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Managers	In your opinion which of your operations, activities, products and/or services result in a significant impact on the environment? How is this determined?	Managers should be able to identify those operations that have been determined to be significant by applying the procedure. This indicates that Management is aware of the fact that there is a specified procedure for determining the significance of the environmental impact of the facility operations, and that the procedure has been effectively implemented.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Managers	How does Headquarters influence your determination of the impact your facility has on the environment?	Managers should indicate that policy direction and advice is provided from HQ, that the facility focuses on departmental priorities as well as those activities over which it has complete control (e.g. PCB storage, U/G tank management) and that it follows HQ lead on others (e.g. fleet management, "green" purchasing).
Management Representative	How do you determine the potential environmental impact of your activities, products and/or services? Are your significant environmental impacts considered when you set objectives and targets? How?	The Management Representative should explain the Aspects Identification/Impact Significance procedure. The Management Representative should indicate that those operations that create significant impacts are given top priority in determining environmental objectives that minimize impacts.
Staff	In your opinion, which of your activities, products and/or services have a significant impact on the environment?	Staff should be able to identify those operations that have been determined to be significant by the application of the procedure. This indicates that effective communication procedures are in place (See Communication).

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Staff	Were you involved in any exercise to identify the environmental aspects of your operations?	Some of the staff members, particularly those involved with activities which have a significant environmental impact, should have been consulted during the assessment of aspects and impacts. These individuals should be able to explain their involvement.

3.4 COMMON EXCEPTIONS

Commonly noted exceptions in auditing the identification and assessment of environmental aspects are:

1. There is no procedure for identifying aspects and determining impacts.
2. The information on aspects and impacts is out-of-date.

3.5 COMMON OBSERVATIONS

Commonly noted observations auditing the identification and assessment of environmental aspects are:

1. Activities, aspects and impacts are not documented. While there is no requirement in the ISO Standard to record this information, it is difficult to demonstrate that the procedure was consistently applied if an Auditor can't review the information.
2. Documentation is incomplete.
3. The "significance" procedure is not consistently applied to all identified activities, products and/or services.
4. Documentation supporting the assessment of environmental aspects does not clearly demonstrate the process of determining significance. This determination is not always completely objective (and it is acceptable to incorporate some professional judgment), but the process must be presented so the Auditor can understand it clearly.

3.6 PRACTICAL HELP

1. Be aware of the fact that this is a critical element in the Environmental Management System. If the organization doesn't clearly and accurately identify its environmental aspects and significant impacts, then the EMS itself will be ineffective because it will be focused on the wrong things.
2. Remember that it is your job as an EMS Auditor to assess if there is a process in place, **but it is not your job to determine what that system should encompass**. You must decide through your interviews and document reviews whether the facility personnel have developed a procedure that works for them.
3. It is important that you and the facility personnel understand the concept that the EMS need only deal with significant environmental aspects **that it can control and over which it can be expected to have an influence**.
4. The most important thing that you have to decide when you are auditing this element of an EMS is whether or not the process that the organization has in place is adequate to identify the important environmental liabilities that the organization faces.

CHAPTER 4 - PLANNING – LEGAL AND OTHER REQUIREMENTS

4.1 WHAT THE ISO STANDARD REQUIRES

For **Legal and Other Requirements**, the ISO Standard specifies that:

- A procedure must be developed to identify legal requirements;
- A procedure must be developed to identify other requirements to which an organization subscribes (codes of practice, guidelines, policies, etc.).

There are also other important things you should consider when evaluating the legal and other requirements, which influence how a facility operates. Remember that not only does an organization have to focus on specific regulations (e.g. PCB Material Storage Regulations), but also on more generic legal requirements such as certain provisions of the Canada Fisheries Act (e.g. Section 36(3) which prohibits the deposit of a deleterious substance into waters frequented by fish). You should assess whether the organization has identified the applicable regulatory requirements and has a process to keep them current. Similarly, with the *"other"* requirements to which an organization subscribes (e.g. codes of practice, guidelines, industry standards), you must be diligent in your assessment of how the organization identifies and keeps its information on these items current.

4.2 Questionnaire Protocol for Planning – Legal and Other Requirements

Legal and Other Requirements (ISO Section 4.3.2)	Notes	WPR
1. **Has the organization established a procedure to identify which environmental laws and regulations apply to its operations?** 2. **Has the organization established a procedure to identify other mandatory government requirements (such as permits and certificates of approval)?** 3. Is this procedure written? (If yes, review) 4. Does this procedure ensure that any new requirements are identified in a timely fashion? (How?) 5. Have the personnel within the organization who need to be aware of information on legal requirements (i.e. those within the organization who need this information in order to keep the facility in regulatory conformance) been identified? 6. **Is the information on legal requirements provided to all those personnel who need to know in a timely manner?** (How?) 7. Is the information on legal requirements provided to others (such as construction crews, contractors) on a case-by-case basis? 8. Are there other requirements to which the organization must comply ? 9. How are these other requirements identified? 10. How are these other requirements updated? 11. Is this procedure written? (If yes, review) 12. **Is the information on other requirements communicated to those personnel who need to know this information (i.e. those within the organization who need this information in order to keep the facility in conformance)?** (How?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

4.3 Recommended Audit Techniques

An audit of the organization's evaluation and documentation of **Legal and Other Requirements** would entail:

1. Document review;
2. Interviews;
3. Visual observations

Practical tips on each of these techniques are presented in the following tables.

4.3.1 Document Review

Document to Review	What to Look For	Why
EMS Legal and Other Requirements Procedure	Does the procedure include who is responsible for compiling the information on legal and other requirements, where the information comes from, how the information is disseminated within the organization and how it is kept up-to-date?	Facilitates an assessment of conformance with the Standard.
Documentation on legal and other requirements (e.g. the conformance registry)	Does the document include a listing of the legal and other requirements and an interpretation of how the requirements apply to the organization?	Allows you to assess the adequacy of the documentation.

4.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Person responsible for implementing procedure (as identified in EMS Manual)	Is the organization subject to any legal environmental requirements? Is the organization subject to any other environmental requirements? How does the organization keep track of its legal and other requirements?	The person responsible should be able to list the major legal and other requirements identified in the conformance registry (or conformance binder, or whatever it is called at the facility in question). The person responsible should be able to describe exactly what the procedure is and his/her role in implementing it.
Management Representative	Is the organization subject to any legal environmental requirements? Is the organization subject to any other environmental requirements? How does the organization keep track of its legal and other requirements? How does the organization ensure that everyone who needs to know the information on legal and other requirements gets this information in a timely manner?	The Management Representative should be able to identify the major legal and other requirements to which the organization subscribes, which are included in the conformance registry. The Management Representative should be able to identify the appropriate EMS procedure and the person responsible. The Management Representative should be able to explain the manner in which this information is disseminated within the organization.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Staff (select those who have a function which is subject to one or more of the legal and/or other requirements)	Are there any legal environmental requirements that are applicable to any of the activities for which you are responsible? Are there any other environmental requirements that are applicable to any of the activities for which you are responsible? How were you made aware of these legal and other requirements?	The personnel should be able to identify the legal and other requirements that are applicable to their specific duties. The personnel should be able to describe the procedure used to convey the information to them, and it should correspond to the procedure in the Manual.

4.3.3 VISUAL OBSERVATIONS

WHAT TO OBSERVE	SPECIFIC OBSERVATIONS	RELEVANCE TO AUDIT
The location(s) of the conformance registry/binder	Is there a distribution list for the conformance binder and can the binder be easily found in all of the specified locations?	Ease of access to the information on legal and other requirements.

4.4 COMMON EXCEPTIONS

Commonly noted exceptions in auditing legal and other requirements are:

1. There is no procedure for identifying and accessing information on legal and other requirements.
2. Information on "other" requirements is not identified.

4.5 COMMON OBSERVATIONS

Commonly noted observations in auditing legal and other requirements are:

1. Staff is not aware of the legal and other requirements.
2. The Conformance Registry/binder is not dated or complete.
3. There is no obvious link between the activities at the organization that can result in significant impacts, and the environmental regulatory and other requirements that apply to these activities.

4.6 PRACTICAL HELP

1. Note that the ISO Standard doesn't require an organization to prepare a conformance binder/registry, only that it develop a procedure to ensure it has access to the applicable requirements. Compiling this information in a conveniently formatted binder, however, is an excellent way to demonstrate that the organization has developed and has easy access to the necessary information. In auditing this component, you should check to see if there is such a binder. If the organization does not have a Conformance binder/registry you may have to revise your audit procedures accordingly. Note also that the documentation can be electronic or hard copy or a combination of both.
2. Remember that regulatory and other requirements frequently change. Make sure that the procedure that the organization develops and implements recognizes and accounts for this reality.
3. Legal requirements are sometimes complex and difficult to interpret. If this is the case, then you should assure yourself that the organization has the ability to interpret these complex legal requirements, either through a legal expert or someone else who has demonstrated expertise in this area.

CHAPTER 5 – PLANNING – OBJECTIVES AND TARGETS

5.1 WHAT THE ISO STANDARD REQUIRES

For **Objectives and Targets**, the ISO Standard specifies that:

- Documented environmental objectives and targets must be established and maintained for each relevant function and level within the organization;
- Legal & other requirements must be considered;
- Significant environmental aspects must be considered;
- Technological options must be considered;
- Financial, operational & business requirements must be considered;
- Views of interested parties must be considered; and,
- The objectives and targets must be consistent with the environmental policy, including the commitment to prevention of pollution.

There are other important issues to consider when evaluating the objectives and targets an organization sets for itself. Objectives may be imposed upon some organizations such as regional facilities that take direction from a Headquarters and/or corporate group. In these cases the overall goal for environmental performance is set by an entity removed from the specific organization, but the organization must determine how it is to meet that performance objective by setting particular targets it can work towards.

5.2 Questionnaire Protocol for Planning – Objectives and Targets

Objectives and Targets (ISO Section 4.3.3)	Notes	WPR
1. **Have specific environmental objectives and targets been established at this facility?** 2. **Are these environmental objectives and targets specific to different departments/ divisions/sections/operating units of the organization?** 3. **Are these written?** (if yes – review) 4. Do these environmental objectives deal with: • Hazardous material management, • Solid waste management, • Hazardous waste management, • Liquid effluent discharges, • Sanitary sewage discharges, • Landfills, • Transportation, • Fugitive emissions, • Air emissions from stacks, • Noise emissions, • Odours from the facility, • Environmental emergencies, • Environmental inspections and audits, • Communications, • Energy consumption, • Others (specify). 5. **In setting its environmental objectives has the organization considered:** • **Its legal requirements** • **Its other relevant requirements** • **Its technological options** • **Its financial requirements** • **Its business requirements** • **Its operational requirements** 6. **Do the environmental objectives reflect the commitments in the environmental policy?** 7. **Do the objectives and targets reflect a commitment to prevention of pollution?** (How?) 8. **Do the environmental objectives reflect what has been identified as the significant environmental impact of the organization's activities?**		

	Notes	WPR
9. Have specific and measurable targets been established for each of the environmental objectives? (SMARTT - specific, measurable, action-oriented, realistic, time based, timely). Have they been documented?		
10. Have the employees at this facility that have responsibility for ensuring the objectives are met had input into developing the objectives? (How?)		
11. Has the organization defined those individuals and groups "concerned with or affected by " its environmental performance (e.g. neighbours, community groups, environmental groups, government regulators, employees, First Nations, the media etc)?		
12. **Have the views of the individuals and groups identified in point 11 above been considered in the development of the environmental objectives?** (How?)		
13. Are the environmental objectives regularly reviewed? (How often and how?)		
14. Are the environmental objectives revised to reflect any necessary and/or desired improvements in environmental performance at this facility? (How?)		
15. Is this process for review and revision of environmental objectives written? (if yes – review)		
16. **Are the objectives and targets consistent with the environmental policy and the commitment to "continual improvement" and prevention of pollution?**		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

5.3 Recommended Audit Techniques

An audit of the organization's **Objectives and Targets** would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

5.3.1 Document Review

Document to Review	What to Look For	Why
EMS Objectives and Targets Procedure	Does the procedure describe how objectives and targets are set, what is considered in setting the objectives and targets, how the objectives and targets are reviewed, approved and how progress is monitored?	Facilitates an assessment of conformance with the Standard.
Documentation on the objectives and targets	Does the documentation identify broad, performance-based objectives and specific, measurable targets? Are objectives and targets set for each relevant function and level of the organization?	Allows you to assess the adequacy of the documentation and if the organization is effectively implementing the appropriate EMS Procedure. Facilitates an assessment of conformance with the Standard.

5.3.2 Interviews

Who to Interview	What to Ask	What to Look for in Answers
Person(s) responsible for implementing procedure (as identified in EMS Manual)	How does the organization identify specific environmental objectives and targets?	The person(s) responsible should be able to describe exactly what is in the EMS procedure and his/her role in implementing it.
Management Representative	How does the organization identify specific environmental objectives and targets?	The Management Representative should be able to describe what is in the EMS procedure and his/her role in implementing it.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	What does the organization consider in setting its objectives and targets?	The Management Representative should indicate that the following items are considered: legal and other requirements, significant environmental aspects, technological options, financial and business requirements, and the views of interested parties.
Staff (select those who have a function which is related to one or more of the targets which have been set)	Are you aware of environmental targets that have been established for (*and name the activity for which the target has been set)*?	Personnel should be able to identify the environmental targets that have been set for all of the activities for which they are responsible.
	Were these specific environmental targets clearly communicated to you when they were established?	Personnel should indicate that they were consulted on the specific targets set for activities for which they are responsible.

5.4 COMMON EXCEPTIONS

Commonly noted exceptions in auditing objectives and targets are:

1. The views of interested parties are not considered when objectives and targets are set;
2. Targets for significant aspects are not set.

5.5 COMMON OBSERVATIONS

Commonly noted observations in auditing objectives and targets are:

1. Targets are not measurable;
2. Organization did not follow its procedure when establishing its objectives and targets;
3. Targets are not achievable.

5.6 PRACTICAL HELP

1. Note that the audit of this element of an EMS is tied very closely to your audit of the significant environmental aspects and the environmental management programs. For each significant aspect there should be an overall environmental objective and specific target(s), and for each target there should be an environmental management program.
2. You should be aware of the fact that objectives and targets must be periodically revisited and revised where necessary. It may be that an organization has set its "sights too high" or "too low" and is unable to achieve its targets in the specified time frames or meets them in a shorter time frame. Particularly in the case where an organization is unable to meet its targets and they need to be revised, you will have to exercise your judgment to determine if this reflects inadequate performance or a flaw in the procedure to set the objectives and targets.

CHAPTER 6 – PLANNING – ENVIRONMENTAL MANAGEMENT PROGRAMS

6.1 WHAT THE ISO STANDARD REQUIRES

For **Environmental Management Programs**, the ISO Standard specifies that:

- Environmental Management Programs (EMPs) must be developed for achieving objectives & targets;
- Responsibility for EMPs must be designated at each relevant function and level of organization;
- The means and time-frame for which EMPs are to be achieved must be included;
- EMPs must be amended where relevant changes occur (e.g. new developments, new or modified activities, products, services).

There are other important things to consider when auditing the EMPs that an organization develops. You should determine if the organization has established a procedure for developing the EMPs, and if that procedure specifies exactly what is to be done and how progress in the EMPs is measured. You should also determine if people involved in implementing the EMPs are fully aware of their specific responsibilities and accountabilities.

6.2 Questionnaire Protocol for Planning – Environmental Management Programs

Environmental Management Program (ISO Section 4.3.4)	Notes	WPR
1. Has the organization established a planning process to ensure that its environmental objectives and targets are achieved? 2. Is this process documented? (if yes – review) 3. **Does the planning result in the establishment of specific programs to achieve each of the environmental objectives and targets?** 4. Do these programs relate specifically to the commitments in the environmental policy? 5. **Do these programs identify who is responsible for achieving each environmental objective and target?** 6. **Do these programs identify specifically what is to be done to achieve each environmental objective and target?** 7. **Do these programs specify the time frame in which each environmental objective and target is to be met?** 8. **Is this planning process and the establishment of programs to achieve environmental objectives and targets applied to new developments at the facility (such as new construction, changes in process, etc.)?** 9. Does the facility management review progress on the EMPs? How?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

6.3 Recommended Audit Techniques

An audit of the organization's development of **Environmental Management Programs** would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

6.3.1 Document Review

Document to Review	What to Look For	Why
EMS Environmental Management Programs Procedure	Does the procedure describe how EMPs are developed? Does the procedure describe how EMPs are to be amended to account for new developments and activities at the organization?	Facilitates an assessment of conformance with the Standard.
Documentation on the EMPs	Does the documentation identify who is responsible for each EMP? Does the documentation identify the means and time frame by which the programs are to be implemented and objectives/targets achieved? Does each objective and target have a corresponding EMP?	Facilitates an assessment of with the Standard.

6.3.2 Interviews

Who to Interview	What to Ask	What to Look for in Answers
Person(s) responsible for implementing procedure (as identified in EMS Manual)	What is the process used to develop EMPs at this facility?	The person(s) responsible should be able to describe exactly what is in the EMS procedure and his/her role in implementing it.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Person(s) responsible for implementing procedure (as identified in EMS Manual)	What happens if a specific target in an EMP is not met?	Person(s) responsible for implementing the procedure should be able to describe the process of dealing with this nonconformance, which should include identifying the cause, correcting the problem and making any necessary adjustments in procedures.
Management Representative	Does the organization develop Environmental Management Programs to specify actions to be taken to meet the objectives and targets? What is the procedure for accomplishing this?	The Management Representative should be able to describe what is in the EMS procedure and his/her role in implementing it.
Staff (select those who have been assigned responsibility for implementing EMP(s))	What is your role in implementing XXXX Environmental Management Program (e.g. waste paper recovery program, oil loss management program, etc)? Were these EMPs clearly presented to you when they were established? Have the EMP targets been met for this year? Why or why not?	Personnel should be able to report exactly what is in the specific EMP, what is to be done, how long it is going to take, and the major milestones. Personnel should indicate that they were consulted on the specific actions to be taken in the EMP and, ideally, would report that they actually developed the EMP. Personnel should be able to report on EMP progress and, if necessary, identify any reasons why specific targets were not met.

6.4 Common Exceptions

Commonly noted exceptions in the audit of Environmental Management Programs are:

1. Programs do not have a target and lack of responsibility allocation and the means to achieve the objective/target.
2. Programs do not specify a reasonable time frame for actions to be completed.

6.5 Common Observations

Commonly noted observations in the audit of Environmental Management Programs are:

1. Targets/objectives are not met and there is no documentation on the reasons why;
2. Management reviews result in amendment of targets/objectives and the EMPs are not adjusted accordingly.

6.6 Practical Help

1. Note that the audit of this element of an EMS is tied very closely with your audit of the significant environmental aspects and the environmental objectives and targets. For each significant aspect there should be an overall environmental objective and specific target(s), and for each target there should be an Environmental Management Program.
2. You should be aware of the fact that some Environmental Management Programs may not seem to accurately fit the definition of a program – they may relate to activities designed to determine where the organization is with respect to a particular activity. For example, an organization may have an EMP to determine how much waste paper is generated and the target may be to develop baseline information. This is a legitimate EMP since it is impossible to measure improvement if you don't have a defined starting point.

CHAPTER 7 – IMPLEMENTATION AND OPERATION – STRUCTURE AND RESPONSIBILITY

7.1 WHAT THE ISO STANDARD REQUIRES

For **Structure and Responsibility**, the ISO Standard specifies that:

- A Management Representative must be appointed by Top Management;
- EMS roles and responsibilities must be documented;
- EMS roles and responsibilities must be communicated;
- Management must provide the required resources to implement the EMS.

There are also other important things to consider when evaluating the structure and responsibilities in an EMS. Two easy ways to document and communicate roles and responsibilities are to develop organizational charts, and to include EMS responsibilities in individual job descriptions. You should assess each of these items if they are available.

7.2 Questionnaire Protocol for Implementation and Operation – Structure and Responsibility

Structure and Responsibility (ISO Section 4.4.1)	Notes	WPR
1. **Has the organization appointed an individual (from Management) with responsibility for ensuring that the requirements of the EMS are met and reporting on the performance of the EMS to Management?**		
2. Does this individual prepare the action plan to implement the EMS?		
3. Does this action plan include budget estimates and environmental objectives?		
4. Does the action plan assign components of the EMS to other members of the organization?		
5. Does the Management Representative regularly monitor the effectiveness of the EMS? (How?)		
6. Are the results of this review documented? (if yes – review)		
7. **Does the Management Representative report regularly to senior management on environmental performance?**		
8. Has the organization identified the relationships between environmental, health and safety and risk (loss prevention) issues?		
9. Has an organizational chart been prepared which identifies all individuals and their responsibility for environmental issues? (if yes - review)		
10. Is there a clear "chain of command" with respect to environmental responsibilities and are all employees with environmental responsibilities aware of this "chain of command"?		
11 Are these responsibilities defined and documented in job descriptions or in procedures? (if yes – review)		
12. Are environmental responsibilities defined and documented in any relevant Policy and Procedures? (if yes – review)		
13. **Are environmental Responsibilities adequately defined and documented?**		
14. **Are personnel who have environmental Responsibilities aware of these Responsibilities?**		
15. Have the resources required to implement the EMS been identified? How?		

	Notes	WPR
16. **Have the resources required to implement the EMS been provided?** (Check budgets.) 17. Does the organization monitor the costs of its environmental activities? (How?) 18. Does the organization monitor the benefits of its environmental activities? (How?) 19. Are these activities (monitoring the costs and benefits) documented? (If yes - review) 20. Are the resources provided adequate for the implementation of the EMS?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

7.3 Recommended Audit Techniques

An audit of the organization's **EMS Structure and Responsibility** element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

7.3.1 Document Review

Document to Review	What to Look For	Why
Organization chart(s)	Does the organization chart clearly depict the "chain of command" with respect to environmental responsibilities and accountabilities? Does the organization chart identify who is responsible for environmental programs at the facility? Does the organization chart identify the Management Representative?	Facilitates an assessment of conformance with the Standard requirement to document roles and responsibilities, and appoint a Management Representative.

DOCUMENT TO REVIEW	WHAT TO LOOK FOR	WHY
EMS procedures and appropriate standard operating procedures	Is the organization chart dated and current? Do the procedures identify responsibilities for particular actions related to the environmental management system?	Facilitates an assessment of conformance with the Standard requirement to document roles and responsibilities.
Job descriptions (particularly the Management Representative and other individuals with EMS responsibilities)	Do the job descriptions include items related to the implementation and control of the EMS?	Facilitates an assessment of conformance with the Standard requirement to document roles and responsibilities.
Correspondence, memos, designating Management Representative or equivalent (if available)	Does the correspondence clearly identify the Management Representative and his/her role in implementing the EMS? Does Top Management at the facility sign the correspondence?	Facilitates an assessment of conformance with the Standard requirement for Top Management to appoint a Management Representative(s) (commonly referred to as the EMS Coordinator).
Files and/or correspondence relating to budgets and resource allocations for EMS activities	Does the correspondence indicate that adequate resources have been provided?	Facilitates an assessment of conformance with the Standard requirement for Top Management to provide the resources necessary to implement the EMS.

7.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Person(s) responsible for implementing EMS procedures and appropriate standard operating procedures (as identified in EMS Manual)	Do you have any role in implementing the procedure for XXX (e.g. reviewing the policy, management reviews, development of EMPs)? What is your role in XXXX operating procedure (e.g. checking inventory levels in fuel tanks, implementing the office waste paper program)?	The person(s) responsible should be able to describe exactly what is in the EMS procedure and his/her role in implementing it. Person(s) responsible for implementing the procedure should be able to describe exactly what the procedure is and his/her role in implementing it.
Management Representative	What is your overall role in implementing the EMS at this facility? Who assigned you these duties? How are resources assigned to the EMS activities and are these resources adequate to effectively implement the EMS?	The Management Representative should be able to describe what is in the EMS procedure and his/her role in implementing it. The Management Representative should indicate that the facility's Top Management assigned the duties. The Management Representative should indicate that the facility Management provides the resources and he/she should be able to describe the budget allocation process. He/she should also be able to offer an opinion on whether the resources are adequate.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Top Managers	Have you appointed a Management Representative for the EMS?	The Top Manager should answer "yes" and identify the individual.
	What are the important roles that the Management Representative plays in developing and implementing the EMS?	The Top Manager should indicate that the Management Representative is responsible for ensuring that the EMS is effectively implemented and for reporting on the status of EMS implementation to facility management.
	How are resources assigned to the EMS activities, and are these resources adequate to effectively implement the EMS?	The Top Manager should indicate that the facility Management provides the resources and he/she should be able to describe the budget allocation process. He/she should also be able to offer an opinion on whether the resources are adequate.

7.4 COMMON EXCEPTIONS

Commonly noted exceptions in the audit of **Structure and Responsibility** are:

1. Roles and responsibilities are not communicated to appropriate personnel;
2. Resources assigned to implement the EMS are not adequate.

7.5 COMMON OBSERVATIONS

Commonly noted observations in the audit of **Structure and Responsibility** are:

1. Job descriptions do not contain any reference to the EMS;
2. Organization charts have not been prepared which show the "chain of command" with respect to the EMS;
3. Personnel with responsibilities defined in procedures in the EMS and in Standard Operating Procedures are not aware of these documented roles;

4. Top Management has not approved (by signature or memo) the assignment of EMS responsibilities to the Management Representative.

7.6 PRACTICAL HELP

1. Note that the ISO Standard refers to a Management Representative who has responsibility for ensuring the EMS is implemented and who reports to management on the status of the EMS. This Management Representative is called different things in different organizations, and the individual may have other responsibilities unrelated to the EMS. The most important thing is that Top Management has to appoint an individual with a defined role in EMS development and implementation and status reporting.
2. The Standard requires roles and responsibilities to be documented and **communicated.** It is not enough for the appropriate and relevant procedures to be prepared. The roles and responsibilities that are designated must be communicated to the appropriate individuals.

CHAPTER 8 – IMPLEMENTATION AND OPERATION – TRAINING, AWARENESS AND COMPETENCE

8.1 WHAT THE ISO STANDARD REQUIRES

For **Training, Awareness and Competence**, the ISO Standard specifies that:

- Training needs must be identified;
- All personnel whose job functions may create a significant impact on the environment must receive appropriate training;
- General environmental awareness training must be provided to all employees;
- Personnel must be competent on the basis of appropriate education, training, and/or experience.

There are also other important issues to consider when evaluating the training, awareness and competence element in an EMS. In order to determine the required training that personnel need, the organization should have undertaken an analysis of training needs. This analysis should have identified job functions and the training necessary to undertake those job functions in an environmentally responsible manner. The organization should have placed emphasis on the training required to satisfy regulatory requirements (e.g. Transportation of Dangerous Goods Regulations) and those job functions related to the facility's significant environmental impacts. As an Auditor, you should focus on these areas when assessing training. You should also assess the hiring practices at the facility to determine if competence is a factor in the candidate evaluation process and how competence is evaluated (particularly long-term) as it relates to EMS.

8.2 Questionnaire Protocol for Implementation and Operation – Training, Awareness and Competence

Training, Awareness & Competence (ISO Section 4.4.2)	Notes	WPR
1. **Does the organization have a process to identify environmental training needs of employees and has it identified those training needs?** 2. Does the organization have a training plan to address these training needs? 3. Is there documentation on the environmental training received by the organization employees? (if yes - review) *Note: Make sure this includes ALL appropriate training records.* 4. **Have all employees whose work may create a significant environmental impact received appropriate training?** 5. **Is there awareness training which includes:** • **the details of the environmental policy and the requirements of the EMS,** • **the importance of conformance with the environmental policy and with the requirements of the EMS,** • **the significant environmental impacts, actual or potential, of individual's work activities,** • **the specific roles and responsibilities of individuals in achieving conformance with the environmental policy and the EMS,** • **specific emergency response procedures;** • **the consequences of departure from operating procedures.** 6. **Are employees whose functions may create a significant environmental impact competent on the basis of appropriate education, training and/or experience?** 7. How is this competence determined?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

8.3 Recommended Audit Techniques

An audit of the organization's **Training, Awareness and Competence** element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

8.3.1 Document Review

Document to Review	What to Look For	Why
Training Needs Analysis	Does the documentation identify specific training needs for individuals involved in activities related to the organization's significant environmental aspects?	Facilitates an assessment of conformance with the Standard requirement to identify training needs.
General Awareness Training documentation	Does the General Awareness Training include the required elements as specified in the ISO Standard?	Facilitates an assessment of conformance with the Standard requirement to make all employees aware of specific items.
Training records	Do the records include employee names, date of training, nature of training and copies of training certificates?	Facilitates an assessment of the nature and adequacy of environmental training.
Documentation on hiring practices	Does the documentation indicate that an assessment of competence on the basis of education, training and experience is undertaken prior to hiring?	Facilitates an assessment of how the organization evaluates potential candidates.

8.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative or designated representative	How are training needs identified?	The Management Representative should be able to describe how the organization determines the environmental training needs of employees involved in functions.
	Is there a plan in place to satisfy the environmental training needs of employees?	The Management Representative should be able to describe how the organization plans to fulfill the training requirements, highlighting the need to focus on training identified in regulations (e.g. TDGR) and training for those involved in activities which have significant environmental impacts.
Training Officer / Human Resources Officer	How is environmental training tracked in this organization?	The Training Officer / HR Officer should be able to describe the procedure for compilation of training records, how they are assessed and how the needs for follow-up training are identified.
	How are candidates evaluated prior to hiring?	The Training Officer / HR Officer should be able to describe the process, focusing on the preparation of job descriptions which identify the required skills and knowledge.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
	How do you determine if a potential candidate is competent to do the job?	The Training Officer / HR Officer should be able to describe the interview process where candidate aptitude and abilities are assessed, and the initial work experience (e.g. probationary period) where job performance is evaluated.
Personnel involved in activities associated with the significant environmental impacts of the organization	Have you had any specific environmental training? Why?	Personnel should be able to describe the environmental training that they have received and how it relates to their particular job functions (e.g. the warehouse supervisor may have had TDGR training because he/she deals with shipping and/or receiving dangerous goods).
	Have you had any General Awareness Training? What was included in that training?	All personnel should answer "yes" to this question and should indicate that the General Awareness Training included all those items identified in the Standard (Section 4.4.2 (a), (b), (c) and (d)).

8.4 Common Exceptions

Commonly noted exceptions in the audit of **Training, Awareness and Competence** are:

1. Not all personnel have received General Awareness Training;
2. Training, awareness and competence are not factored into orientation;
3. Refresher courses are not provided to information current for all staff;
4. Step-up/transfer training not adequate to satisfy temporary positions/promotions, etc.
5. The organization has not clearly identified the training needs of its employees involved in job functions which may have a significant environmental impact.

8.5 Common Observations

Commonly noted observations in the audit of **Training, Awareness and Competence** are:

1. Personnel cannot describe the elements of the General Awareness Training – this may be an indication that the training was not appropriate and/or did not address the required topics in a manner that the personnel at the facility could understand.

8.6 Practical Help

1. You should recognize that training could mean formal training courses, self-learning, on-the-job training, mentoring, apprenticeships, etc. These should all be assessed when you are auditing this element of an EMS (need evidence of this type of training).
2. General Awareness Training should be designed to make employees understand and share in the environmental commitments enunciated in the EMS. As an Auditor you should focus on the way that personnel describe the training, what they remember from it and how they actually relate to what was in the training. This will give you a basis for assessing the effectiveness and appropriateness of the training.
3. New employee orientation programs are an important way of identifying the environmental priorities of the organization to new employees. You should determine the nature and content of orientation programs in order to assess whether the organization does enough to convey its environmental message to new employees.

CHAPTER 9 – IMPLEMENTATION AND OPERATION – COMMUNICATION

9.1 WHAT THE ISO STANDARD REQUIRES

For **Communication**, the ISO Standard specifies that:

- Internal communication procedures must be established and maintained between the various levels and functions of the organization.
- Procedures must be established and maintained for receiving, documenting and responding to relevant communication from external interested parties.
- Processes for external communication regarding environmental aspects must be considered and the decision must be documented.
- Communication procedures must be documented.

There are also some other important things to consider when evaluating the communication element in an EMS. The ISO Standard makes numerous references to "external interested parties", and it is important for an organization to know who these "external interested parties" are in order to respond to the issues and concerns they may raise. It is also important for communication methods used in the workplace to be effective. It is not enough to post the environmental policy or new environmental procedures on the bulletin board and expect all employees to read them. The particular needs and priorities of different levels of staff in the workplace have to be identified and considered in the development of internal communication strategies.

9.2 Questionnaire Protocol for Implementation and Operation – Communication

Communication (ISO Section 4.4.3)	Notes	WPR
1. **Is there a procedure in place to communicate information on environmental performance between different levels of the organization?** 2. Is the procedure documented? (If yes, review.) 3. Has the organization established a process for receiving and responding to employee concerns? (What is it?) 4. Is the internal communication adequate to support continual improvement? 5. Are the objectives and targets communicated to appropriate staff? 6. Have deadlines for meeting the objectives and targets been specified and communicated to appropriate staff? 7. Have written Standard Operating Procedures explaining each action been distributed to the appropriate staff? 8. **Is there a process for receiving, recording and responding to concerns/complaints from other interested parties? (What is it?)** 9. Is the process documented? (If yes, review). 10. Is there a process for externally communicating information: • On management commitment to the environment; • On environmental aspects of the organization's activities • to raise awareness of the organization's; • Environmental policies, objectives, targets and programs; • The organization's environmental management system and performance. 11. Is the process documented? (If yes, review). 12. **Has the organization considered processes for external communication on its significant environmental aspects and has this decision been recorded?** (If yes, review). 13. Is this process documented? (If yes, review). 14. Is there a documented process in place to communicate with government authorities on the organization's environmental management system and performance? (What is it?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

9.3 Recommended Audit Techniques

An audit of the organization's **EMS Communication** element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

9.3.1 Document Review

Document to Review	What to Look For	Why
EMS Procedure(s) relating to internal and external communications	Does the procedure identify how environmental information is conveyed to different levels of the organization? Does the procedure identify how the organization deals with communication from external interested parties?	Facilitates an assessment of conformance with the Standard requirement to establish procedures for internal and external communication. Facilitates an assessment of conformance with the Standard requirement to establish procedures for managing communications from external parties.
EMS Manual and/or records of Management Review meetings	Does the Communications section of the Manual (or minutes from early Management Review meetings) include a record of the decision the organization made with respect to external communications on its significant environmental aspects?	Facilitates an assessment of conformance with the Standard requirement to record such a decision.
File on Communications from the Public	Does the file contain records of communications from the public and does the documentation conform to the EMS procedure?	Facilitates an assessment of whether the organization effectively implements its own procedure.

9.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative or Designated person	How is environmental information transmitted in the workplace?	The Management Representative should be able to describe how various personnel (e.g. managers, supervisors, directors) communicate environmental information to their respective staffs. He/she should also be able to identify other methods of communication in the workplace. He/she should be able to accurately indicate what is in the EMS procedure.
	Have you identified the "external interested parties" with whom you should communicate and decided on how this communication will be undertaken?	The Management Representative should be able to identify the "external interested parties" (e.g. government regulators, neighbours, environmental groups, First Nations) and describe how environmental information about the organization is communicated to them (e.g. through annual reports, through a WEB site, through guided tours, etc.).
Staff	How are you made aware of environmental information of interest to you in your workplace?	Staff should describe the same methods that were documented in the EMS Communications procedure and the methods identified by the Management Representative.

9.4 Common Exceptions

Commonly noted exceptions in the audit of **Communication** are:

1. The decision on external communication on significant environmental aspects is not recorded;
2. There is no procedure for receiving, recording and responding to relevant communication from external interested parties.

9.5 Common Observations

Commonly noted observations in the audit of **Communication** are:

1. Organizations often do not identify communications with the public during guided facility tours as a form of communication with "external interested parties";
2. Staff do not accurately recall environmental information which is conveyed at safety meetings and other workplace forum.

9.6 Practical Help

1. External communication does not always have to be in written form. A lot of environmental information can be conveyed to members of the public during guided facility tours. You should be aware of this and assess this element if it is relevant at the facility you are auditing.
2. An organization does not have to tell everybody everything about its EMS. You must be judicious in your evaluation of this component and recognize that there are limits to what an organization should and can share with external parties and all of its employees. For employees, the form and content of the communications is equally important. You must assess if what is being communicated is actually being understood by those to whom it is directed.
3. An EMS should be integrated with other systems within an organization where possible and appropriate. Communication is one area where a facility may take advantage of existing systems, procedures and personnel to get the environmental information to the intended audiences. In such a case, you must recognize that use of internal, existing resources is an efficient way to integrate environmental programs into the organization, and there is no real benefit to duplicating existing programs that can be amended and/or, adapted to serve the purposes of the EMS. In such cases, however, there must be an adequate reference in the EMS Manual to the appropriate procedure.

CHAPTER 10 – IMPLEMENTATION AND OPERATION – ENVIRONMENTAL MANAGEMENT SYSTEM DOCUMENTATION

10.1 WHAT THE ISO STANDARD REQUIRES

For **Environmental Management System Documentation**, the ISO Standard specifies that:

- Information must be established and maintained (in paper or electronic form) to describe the core elements of the EMS and their interaction;
- Information must be established and maintained (in paper or electronic form) to provide direction to related documentation.

There are also some other important considerations when evaluating the documentation element in an EMS. The ISO Standard does not require each and every procedure that relates to the EMS to be documented. Most organizations, however, will develop and document procedures to describe how they intend to conform to each element of the Standard. In addition to making the EMS audit easier, it provides a solid record of how the facility will implement its EMS. Therefore, the EMS documentation should be complete enough so that it is clear how the many components of the EMS fit together, and how related documents complement the implementation of the EMS.

10.2 Questionnaire Protocol for Implementation and Operation – Environmental Management System Documentation

Documentation (ISO Section 4.4.4)	Notes	WPR
1. **Is there documentation that describes the core elements of the environmental management system?** (If yes – review) 2. Does this documentation include: • corporate direction (policy, objectives and targets), • roles and responsibilities, • reporting system at the organization including the internal and external reports which are to be generated and a format for such reports. These reports may include monthly reports, quarterly reports, environmental reports, regulatory reports, incident reports, etc., • process summaries (flow charts, release points at the facility) and approvals (permits), • pertinent legislation and overview of regulatory requirements, • general policies and procedures, • standard operating procedures for pollution control equipment, • references. 3. **Does the documentation provide reference to other related documentation?** 4. Is this documentation integrated with existing systems such as health & safety, loss prevention, purchasing, etc.? (How?) 5. Is the style of writing easy to understand? 6. Have personnel been involved in the development of the EMS documentation, particularly the SOPs? 7. Has there been a training seminar to introduce the EMS documentation? 8. Is there a process to distribute the EMS manual to appropriate personnel? (What is it?) 9. Does the documentation support employee awareness of what is required of them?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

10.3 Recommended Audit Techniques

An audit of the organization's **EMS Documentation** element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

10.3.1 Document Review

Document to Review	What to Look For	Why
EMS Manual	Does the Manual accurately describe the core elements of the Environmental Management System and how the organization will implement the system? Does the Manual provide accurate direction to other, related documentation such as emergency plans, standard operating procedures, conformance registries, etc.?	Facilitates an assessment of conformance with the Standard requirement to establish and maintain information to describe its EMS. Facilitates an assessment of conformance with the Standard requirement to provide direction to related documentation.
Selected documents and/or files listed in the EMS Manual as related documentation	Does the document relate directly to the EMS?	Facilitates an assessment of conformance with the Standard requirement to provide direction to related documentation.

10.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative or Designated person	Have you prepared documentation that describes the core elements of your EMS and provides direction to other, related documentation?	The Management Representative should answer "yes" to this question and indicate that the EMS Manual (may be called something else) contains that information.

10.4 COMMON EXCEPTIONS

Commonly noted exceptions in the audit of **Documentation** are:

1. The EMS Manual does not provide adequate direction to related documentation (e.g. inaccurate references, references to documents that no longer exist);
2. The EMS Manual does not describe the core elements of the EMS.

10.5 COMMON OBSERVATIONS

Commonly noted observations in the audit of **Documentation** are:

1. The EMS Manual contains minor documentation errors.

10.6 PRACTICAL HELP

1. While this may seem a small audit component, you will find that this element takes a comparatively long time to complete and you will inevitably find a number of exceptions and observations related to documentation.
2. The easiest way to audit this element is to gather all of the written documents which relate to the EMS and carefully review them, paying particular attention to the description of the key elements (as defined in the ISO Standard) and the accuracy of the references to other, related documentation.

CHAPTER 11 – IMPLEMENTATION AND OPERATION – DOCUMENT CONTROL

11.1 WHAT THE ISO STANDARD REQUIRES

For **Document Control**, the ISO Standard specifies that procedures must be established and maintained for controlling all documents required by the ISO Standard to ensure that:

- Documents can be located;
- Documents are periodically reviewed, revised as necessary and approved for adequacy by authorized personnel;
- Current versions of relevant documents are available at all locations where operations essential to effective functioning of system are performed;
- Obsolete documents are promptly removed from all points of issue and points of use, or otherwise assured against unintended use;
- Any obsolete documents retained for legal and/or knowledge preservation are suitably identified;
- Documentation is legible;
- Documentation is dated (with dates of revision);
- Documentation is readily identifiable;
- Documentation is maintained in an orderly manner;
- Documentation is retained for a specified period.

There are also some other important issues to consider when evaluating the document control element in an EMS. Even where the ISO Standard does not require certain items to be documented, most organizations will prepare documentation on procedures and practices to demonstrate its conformance with all elements of the Standard. Where documents have been prepared which support the EMS then they must comply with the requirements for document control. Basically, all the documents must be accessible, reviewed as necessary, and current.

11.2 Questionnaire Protocol for Implementation and Operation – Document Control

Document Control (ISO Section 4.4.5)	Notes	WPR
1. **Are there procedures in place to ensure that all documents related to the EMS can be readily located?** (What are they?) 2. **Are the documents dated, with dates of revision?** 3. **Are the documents legible?** 4. **Are the documents readily identifiable as being related to the EMS?** 5. **Are the documents retained for a specific period of time?** (How long?) 6. **Are the documents periodically reviewed and revised as necessary?** (How?) 7. **Are the current versions of all documents available at the locations where they are needed?** 8. **Are all obsolete documents removed?** 9. **Are obsolete documents retained for legal and/or knowledge purposes suitably identified?** (How?) 10. Is there an individual responsible for collection of appropriate information for each of the documents? (Who is it?) 11. **Is there a process for review of each of the documents prior to distribution?** 12. Is there a process to maintain confidentiality and distribution (who gets copies of the documents)? (What is it?) 13. Is there a process for dealing with draft documents and supporting documentation? 14. Is the document control at the organization adequate, i.e.: • does the organization have the environmental information it needs to manage environmental issues effectively? • does the organization have a document control system that makes information available to the people who need it when they need it?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

11.3 Recommended Audit Techniques

An audit of the organization's **Document Control** element would entail:

1. Document review;
2. Interviews;
3. Observations.

Practical tips on each of these techniques are presented in the following tables.

11.3.1 Document Review

Document to Review	What to Look For	Why
Procedure in EMS Manual relating to Document Control	Does the procedure include the necessary steps to ensure that documents related to the EMS are managed in conformance with the Standard?	Facilitates an assessment of conformance with the Standard requirement to establish and maintain procedures to ensure that documents can be located, are reviewed, are current (with obsolete ones removed).
Selected documents listed in the EMS Manual as related documentation	Do these documents meet the specifications of the Standard (e.g. are they dated, are they legible, are they maintained in an orderly manner, were they can be easily located)?	Facilitates an assessment of conformance with the Standard document control requirements.

11.3.2 Interviews

Who to Interview	What to Ask	What to Look for in Answers
Management Representative or Designated person	Have you prepared a procedure for controlling documents that are an integral part of your EMS?	The Management Representative should answer "yes" to this question and describe the steps in the procedure which is contained in the EMS Manual or a related document.
Document Control Clerk (person assigned the duties of controlling files and documents)	Is there a procedure for controlling documents that are an integral part of your EMS?	The Document Control Clerk should answer "yes" to that question and explain the same procedure as the Management Representative.

11.3.3 Visual Observations

What to Observe	Specific Observations	Relevance to Audit
Areas where documents are located	Is the document in the specific location identified in the EMS Manual (e.g. if the Emergency Plan is listed as being in the First Floor file room, then you should be able to easily find that plan in that location)?	Indicates if documents can be located and if they are maintained in an orderly fashion.

11.4 Common Exceptions

Commonly noted exceptions in the audit of **Document Control** are:

1. Current versions of relevant documents are not available;
2. Relevant documents are not maintained in an orderly manner;
3. Documents are not readily identifiable;
4. Documents are not approved;
5. Obsolete documents retained for legal or knowledge purposes are not suitably identified.

11.5 Common Observations

Commonly noted observations in the audit of **Document Control** are:

1. The procedure for document controls is not consistently followed;
2. When documents are electronically filed, often there is no mechanism to prove that the current versions are available at the specified locations.

11.6 Practical Help

1. Your job in auditing this element is to evaluate the system in place to control EMS documents. it is not your job to determine if the documents are adequate and effective. For example, you would not assess the Emergency Plan for completeness in this element. You would only determine if the Emergency Plan was dated, current, easily located and available at the locations specified in the EMS.
2. Document control procedures most often include a written procedure that is included in the EMS Manual, and a list of controlled documents (again included in the EMS Manual).

CHAPTER 12 – IMPLEMENTATION AND OPERATION – OPERATIONAL CONTROL

12.1 WHAT THE ISO STANDARD REQUIRES

For **Operational Control**, the ISO Standard specifies that:

- Operations and activities associated with significant environmental aspects must be identified (in line with policy, objectives and targets);
- Procedures must be established, documented and maintained to cover situations where the absence of documented procedures (including maintenance) could lead to deviations from environmental policy, objectives and targets;
- Operational criteria must be stipulated in these procedures;
- Procedures must be established and maintained regarding the significant environmental aspects of goods and services used by the organization and communicated to suppliers and contractors.

There are other important issues to consider when evaluating the operational control element in an EMS. This is one of those areas where procedures must be documented, so operational controls on those activities that could create a significant environmental impact must be written down. In order to effectively address this element, an organization must first determine those activities which must be controlled and then develop procedures to control them. This element also places an onus on an organization to assess the possible environmental issues related to the goods and services it purchases from contractors and suppliers and do what it can to minimize any related adverse impacts.

12.2 Questionnaire Protocol for Implementation and Operation – Operational Control

Operational Control (ISO Section 4.4.6)	Notes	WPR
1. **Has the organization identified and documented those operations and activities associated with the significant environmental aspects?** 2. **Has the organization identified and documented those operational controls for those activities (# 1) which if not properly implemented could result in a deviation from the policy, objectives and targets?** 3. **Has the organization established and documented procedures to ensure these operational activities are properly carried out** (e.g. plant operating instructions, plant operating procedures, etc.)**?** 4. **Has the organization established and documented procedures related to the significant environmental aspects of the goods and services it uses** (e.g. purchases from outside suppliers and contractors)**?** 5. **Has the organization communicated these procedures to suppliers and contractors?** (How?) 6. Does the organization ensure that its suppliers and contractors follow these procedures? (How?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

12.3 Recommended Audit Techniques

An audit of the organization's **Operational Control** element would entail:

1. Document review;
2. Interviews;
3. Visual Observations.

Practical tips on each of these techniques are presented in the following tables.

12.3.1 Document Review

Document to Review	What to Look For	Why
Procedures in EMS Manual or other documents relating to Operational Controls	Do the procedures indicate exactly what is to be done to ensure that the activities do not result in adverse impacts?	Facilitates an assessment of conformance with the Standard requirement to establish and maintain operational procedures to cover situations where adverse impacts could occur.
EMS Manual (section dealing with significant impacts and the one dealing with operational controls)	Is there an operational control procedure identified for each of the activities that were associated with the significant environmental aspects? Are these procedures adequate to ensure that the organization meets its environmental objectives and targets and the commitments of its policy?	Facilitates an assessment of conformance with the Standard requirement to develop adequate procedures for those activities associated with the identified significant environmental aspects. Facilitates an assessment of conformance with the Standard.
Contractor Orientation Manual (or any instructions which are given to contractors who undertake work on the site)	Does the Manual (or other instructions) identify environmental procedures stipulated by the organization?	Facilitates an assessment of conformance with the Standard requirement to identify significant environmental aspects of goods and services, to develop appropriate procedures and to communicate them to contractors.
Purchasing policy	Does the policy identify environmental procedures stipulated by the organization?	Facilitates an assessment of conformance with the Standard requirement to identify significant environmental aspects of goods and services, develop appropriate procedures and communicate them to suppliers.

12.3.2 Interviews

Who to Interview	What to Ask	What to Look for in Answers
Management Representative	Have operational procedures been prepared, where required, for all those activities that are associated with your significant environmental aspects?	The Management Representative should answer "yes" to this question and indicate where those operational procedures are located.
Staff involved in implementing several of the documented operational procedures (they should be identified in the procedure itself or by the Management Representative)	Is there a procedure for XXXX and what is your role in implementing that procedure? (e.g. procedure for energy conservation in the office, procedure for operating the wastewater treatment plant, procedure for managing spent printer cartridges)?	Staff should answer "yes" to that question and should be able to describe their role in implementing the procedure. The role they describe should be exactly what is written in the procedure.

12.3.3 Visual Observations

What to Observe	Specific Observations	Relevance to Audit
Implementation of several of the documented operational procedures	Is the person implementing the procedure following the steps as documented?	Indicates if operational control procedures are being followed.

12.4 Common Exceptions

Commonly noted exceptions in the audit of **Operational Control** are:

1. Operational control procedures have not been developed and documented for all activities associated with the identified significant environmental aspects.
2. The organization has not developed procedures related to the significant environmental aspects of the goods and services it purchases.
3. The organization has not communicated appropriate procedures to contractors and / or suppliers.

12.5 Common Observations

Commonly noted observations in the audit of **Operational Control** are:

1. Operational procedures are not properly referenced in the EMS Manual.
2. Operational procedures are not appropriate to the activity with which they are associated.

12.6 Practical Help

1. You must ensure that each of the activities that could result in a significant environmental impact has an associated operational control procedure. This procedure should indicate exactly what is to be done to ensure that the activity does not result in adverse environmental impacts.
2. You should recognize that operational control procedures for many activities would have been developed separate from many of the EMS procedures. This is not a problem provided that the appropriate procedures are adequately referenced in the EMS documentation.
3. This is one of the EMS elements that the ISO Standard stipulates must be documented, so you must be able to find procedures that are documented and that are readily identifiable as being related to the EMS. For example, one of the operational control procedures for a wastewater treatment plant may be the Operator Control Instructions. These instructions must then be referenced in the EMS documentation.
4. It is important to remember that an organization's EMS must manage those activities over which it has control and over that it can be expected to have an influence. In assessing how the organization manages impacts related to the goods and services it purchases can be a real issue, because some organizations (e.g. regional offices of national organizations) do not set purchasing policy nor do they have complete autonomy when it comes to contracting services. In these cases, the environmental aspects of goods and services are not within the facility's control and you cannot expect these to be included in the EMS.

CHAPTER 13 – IMPLEMENTATION AND OPERATION – EMERGENCY PREPAREDNESS AND RESPONSE

13.1 WHAT THE ISO STANDARD REQUIRES

For **Emergency Preparedness and Response**, the ISO Standard specifies that:

- Procedures must be established and maintained to identify the potential for and how to respond to accidents and emergency situations;
- The procedures must address preventing and mitigating environmental impacts that may be associated with accidents and emergency situations;
- Emergency preparedness and response procedures must be reviewed and revised, where necessary, particularly after accidents and emergency situations;
- Procedures referred to above must be periodically tested, where practicable.

There are also other important considerations that must be taken into account when evaluating the emergency preparedness and response element in an EMS. The Standard recognizes that accidents and other emergencies are inevitable, and requires organizations to be prepared for these events. The Standard also places emphasis on prevention of such emergency events and this is an important element to consider when auditing this element. The Canadian Standard (CAN/CSA-Z731-95 - Emergency Planning for Industry) is a useful reference when assessing this element of an EMS.

13.2 Questionnaire Protocol for Implementation and Operation – Emergency Preparedness and Response

Emergency Preparedness & Response (ISO Section 4.4.7)	Notes	WPR
1. **Has the organization identified and documented the potential for adverse environmental impacts as a result of emergency operating conditions?** 2. **Has the organization identified and documented the potential for adverse environmental impacts as a result of accidents?** 3. **Has the organization developed an emergency response plan** which includes: • the emergency organization, • key personnel and their responsibilities, • details of available emergency services, • internal and external communication plans, • actions to be taken in the event of different types of emergency situations, • information on hazardous materials stored at the organization, • information on the potential environmental impact of materials stored at the facility, • training requirements, • testing requirements. 4. **Is there a documented procedure in place to review and revise the emergency response plan, particularly after an incident? (Look for revisions/updates)** 5. **Has the organization tested the emergency response plan? (Verify)** 6. Is there adequately trained staff at the organization to implement the emergency response plan? 7. Is the emergency response plan documented? (If yes - review) 8. Are copies of the plan accessible to those personnel who are named as responders? 9. Does everyone named in the plan know that he/she is named and his/her responsibilities?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

13.3 Recommended Audit Techniques

An audit of the organization's **Emergency Preparedness and Response** element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

13.3.1 Document Review

Document to Review	What to Look For	Why
Procedure in EMS Manual dealing with emergency preparedness and response	Does the procedure include a requirement to evaluate potential emergency events at the facility? Does the procedure include a requirement to periodically review the emergency plan, particularly after an emergency event? Does the procedure indicate a testing protocol for the emergency plan?	Facilitates an assessment of conformance with the Standard requirement to develop procedures to identify emergency events, prepare appropriate response procedures, test these procedures and periodically review and revise the procedures.
Emergency Plan(s)	Does the plan identify the incidents that could result in an emergency at the facility? Does the plan include an evaluation of the hazards and risks of each possible emergency event? Does the plan identify the proposed response organization, capabilities and procedures at the facility?	Facilitates an assessment of conformance with the Standard and the adequacy of the Emergency Plan(s).

13.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	Has a procedure been developed to identify, prepare for and respond to emergency events? Has an emergency plan(s) been developed which includes procedures for responding to emergency events and preventing and mitigating any resulting environmental impacts?	The Management Representative should answer "yes" to this question and indicate what the procedure is. The Management Representative should answer "yes" to this question and indicate where the plan can be located.
Person(s) identified in the Emergency Plan(s) as the On Scene Commander (OSC) (or other title indicating the person in charge of the emergency response)	Has an emergency plan(s) been developed which includes procedures for responding to emergency events and preventing and mitigating any resulting environmental impacts? What is included in the plan(s)?	The OSC should answer "yes" to this question. The OSC should indicate that the plan includes a description of the response organization, the response procedures, the response equipment available, etc. (basically the elements that are included in the plan(s)).
Staff identified in the plan(s) as being responsible for emergency response	What is your role in the response to an emergency at this facility? Have you been trained in the necessary emergency response procedures?	Staff should be able to describe their roles as presented in the plan (*Note: if they cannot, this is an exception under Section 4.4.1 Structure & Responsibility).* Staff should answer "yes" to this question and indicate the nature and extent of their training (*Note: a "no" response here is an exception under 4.4.2 Training, Awareness & Competence).*

13.4 Common Exceptions

Commonly noted exceptions in the audit of **Emergency Preparedness & Response** are:

1. The organization does not have a procedure for identifying the potential for accidents and emergency events.
2. The organization has not tested its emergency procedures.
3. The Emergency Plan is out of date.
4. Emergency procedures are not adequately maintained (e.g. call out procedures particularly are often out-of-date).

13.5 Common Observations

Commonly noted observations in the audit of **Emergency Preparedness & Response** are:

1. The testing procedure for the Plan does not specify how the procedure is to be implemented.
2. Items are not properly referenced.

13.6 Practical Help

1. You must ensure that the organization has not only established adequate emergency response procedures but that it has also undertaken an exercise to identify the potential for emergency events. This is an important component of emergency planning and allows an organization to focus on those events that are likely to happen and that have the potential for adverse environmental impacts. The identification of the potential for emergency events does not have to be a complicated risk assessment, but should include an evaluation of the events that could occur that would constitute an emergency, the probability that the event will occur, and the possible environmental impacts.
2. Testing of emergency procedures is an important element of emergency planning, and the procedures should be tested before an actual emergency occurs, if at all possible. Therefore, you should carefully assess this item since the Standard requires testing "where practicable". If an organization indicates that it is not practicable to test its emergency procedures, you should be prepared to question this decision quite aggressively.

CHAPTER 14 – CHECKING AND CORRECTIVE ACTION – MONITORING AND MEASUREMENT

14.1 WHAT THE ISO STANDARD REQUIRES

For **Monitoring and Measurement**, the ISO Standard specifies that:

- Procedures must be established, documented and maintained to monitor and measure, on a regular basis, the key characteristics of operations and activities that can have a significant impact on the environment;
- Information must be recorded to track performance;
- Information must be recorded to track relevant operational controls;
- Information must be recorded to track conformance with environmental objectives and targets;
- Monitoring equipment must be calibrated and maintained and calibration records kept;
- A documented procedure must be established and maintained for periodically evaluating conformance with relevant environmental legislation and regulations.

Again, there are other important considerations to keep in mind when evaluating the monitoring and measurement element in an EMS. This element requires an organization to undertake six separate monitoring-related activities:

1. it must monitor discharges and emissions where these may cause a significant environmental impact,
2. it must calibrate monitoring instruments,
3. it must periodically revisit objectives and targets,
4. it must periodically check operational procedures,
5. it must conduct self-audits to check regulatory conformance, and,
6. it must document these monitoring-related activities.

14.2 QUESTIONNAIRE PROTOCOL FOR CHECKING AND CORRECTIVE ACTION – MONITORING AND MEASUREMENT

MONITORING AND MEASUREMENT (ISO SECTION 4.5.1)	Notes	WPR
1. Has the organization identified appropriate performance indicators that relate to its objectives and targets (see environmental objectives and targets)? (e.g. quantity of wastes produced, efficiency of energy use, percentage waste recycled, specific pollutant quantities, number of spills, etc.) 2. **Is there a process in place to monitor progress with respect to the performance indicators?** 3. **Has the organization established documented procedures to monitor and measure on a regular basis the key characteristics of its operations and activities that can have a significant impact on the environment** (how often)**?** (refer to the significant environmental aspects) 4. Do these procedures include the recording of information on: • Environmental performance • Relevant operational controls • Conformance with the organization's environmental objectives and targets 5. **Are there procedures in place to maintain sample measuring and monitoring equipment?** 6. **Are these procedures documented?** (If yes – review) 7. **Is this equipment calibrated?** (If yes - how often?) 8. **Are records of the equipment calibration kept?** (If yes – review) 9. **Does the organization have a system in place to evaluate conformance with appropriate environmental regulations?** 10. Is this system documented? (If yes - review)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

14.3 Recommended Audit Techniques

An audit of the organization's EMS Monitoring and Measurement element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

14.3.1 Document Review

Document to Review	What to Look For	Why
EMS documentation dealing with monitoring and measurement	Is a monitoring procedure associated with each of the activities that could have a significant environmental impact?	Facilitates an assessment of conformance with the Standard requirement to monitor those activities that could have a significant impact on the environment.
	Is there a procedure to periodically evaluate conformance with regulatory requirements?	Facilitates an assessment of conformance with the Standard requirement to evaluate conformance with regulatory requirements.
EMS documentation dealing with calibration of monitoring equipment	Is a calibration procedure specified for the monitoring equipment that is used at the facility?	Facilitates an assessment of conformance with the Standard requirement to calibrate monitoring equipment.
Calibration records	Are calibration records kept for each of the pieces of monitoring equipment?	Facilitates an assessment of conformance with the Standard requirement to maintain calibration records.

14.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	Has a procedure been developed to monitor and measure on a regular basis those activities that could have a significant environmental impact?	The Management Representative should answer "yes" to this question and indicate what the procedure is.
	Has a procedure been developed to periodically assess conformance with your regulatory requirements?	The Management Representative should answer "yes" to this question and indicate what the procedure is.
	Is monitoring equipment regularly calibrated and maintained? Where are the calibration records kept?	The Management Representative should indicate that monitoring equipment is regularly calibrated and identify where the records are kept.
Person(s) identified in the EMS documentation as being responsible for implementing monitoring procedures, calibrating equipment and maintaining calibration records	What is your role in monitoring XXX activity? (e.g. managing underground storage of fuel) What is your role in calibrating XXX equipment? What is your role in maintaining the calibration records?	Staff should be able to describe the monitoring procedure(s), the calibration procedures and/or the record maintenance procedures – the description should match what is documented in the EMS.
Person(s) identified in the EMS documentation as being responsible for implementing regulatory conformance evaluation procedures	What is your role in evaluating conformance with the environmental regulations that apply at this facility?	Staff should be able to describe the conformance assessment procedure and the description should match to what is documented in the EMS.

14.4 Common Exceptions

Commonly noted exceptions in the audit of **Monitoring and Measurement** are:

1. Calibration records for monitoring equipment are not kept.
2. There is no internal environmental audit of regulatory conformance.
3. Monitoring equipment is not calibrated and maintained.
4. Lack of appropriate monitoring and measurement of objectives and targets.

14.5 Common Observations

Commonly noted observations in the audit of **Monitoring and Measurement** are:

1. Monitoring equipment is not identified in the EMS documentation (e.g. scales for measuring weight of waste paper; dip sticks for measuring inventory levels in underground tanks).

14.6 Practical Help

1. In auditing this component of an EMS, you must be aware of the fact that there are a number of different activities that could be construed as monitoring in the context of an EMS. The decision you must make is whether these activities, in total, provide sufficient and relevant information to allow the organization to gauge how well it is doing with respect to its environmental objectives; to document progress related to environmental performance measures.
2. The ISO Standard recognizes that there is no value to "bad" monitoring data and places emphasis on the maintenance and calibration of any instruments that are used to provide data on activities that could cause a significant environmental impact. You must recognize the importance of collecting valid monitoring data and be diligent in your evaluation of monitoring equipment, calibration procedures and record keeping. You must also assure yourself that each activity identified in the EMS as significant (i.e. that could result in significant environmental impacts) is adequately monitored.
3. You must not ignore activities related to monitoring progress towards the organization's objectives and targets. Periodic evaluation of progress, management review meetings and preparation of report cards on progress are all activities which support the monitoring and measurement element.
4. Periodic evaluation of conformance with regulatory requirements is a "must do", and most organizations will develop and implement an internal auditing plan to accomplish this. You must ensure that whatever the organization does to evaluate regulatory conformance is appropriate and is adequate to assess conformance.

CHAPTER 15 - CHECKING AND CORRECTIVE ACTION – NONCONFORMANCE AND CORRECTIVE AND PREVENTIVE ACTION

15.1 WHAT THE ISO STANDARD REQUIRES

For **Nonconformance and Corrective and Preventive Action**, the ISO Standard specifies that:

- Procedures must be established and maintained for defining responsibility and authority for handling and investigating nonconformance;
- Procedures must be established and maintained for taking mitigative action;
- Procedures must be established and maintained for initiating and completing corrective and preventive action;
- Corrective and preventive action taken to eliminate causes of actual/potential nonconformance must be appropriate to the magnitude of the problem and the environmental impact encountered;
- Any changes in documented procedures resulting from corrective and preventive action must be implemented and documented.

There are other important considerations as well. The Standard recognizes that nonconformance will occur (e.g. targets will be missed, regulatory requirements will be exceeded, procedures will be ineffective). In order for an EMS to meet the requirements of the Standard, it is necessary to have a procedure to investigate the causes of nonconformance and to take actions to alleviate the problem and prevent its recurrence where possible. The Standard focuses on the benefits of preventing pollution and therefore this section places equal emphasis on corrective and preventive actions taken to manage nonconformance.

15.2 Questionnaire Protocol for Checking and Corrective Action – Nonconformance and Corrective and Preventive Action

Non Conformance and Corrective and Preventive Action (ISO Section 4.5.2)	Notes	WPR
1. **Has the organization developed procedures to identify and document incidents of non-conformance and/or deficiencies in the EMS, such as objectives and targets missed, incidents and accidents, ineffective procedures?** 2. **Does one individual have responsibility and authority for documenting and investigating incidents of non-conformance?** (Who is it?) 3. **Does that individual have responsibility to take action to mitigate impacts?** 4. **Does the procedure ensure that the following items are addressed:** • **identifying the cause of the non-conformance,** • **identifying the necessary corrective action** • **implementing the necessary corrective action,** • **developing new and/or modifying existing controls necessary to avoid repetition of the non-conformance,** • **recording any changes in written procedures resulting from any corrective actions taken.** 5. Is there a documented follow-up procedure to ensure that the corrective actions have been implemented and are effective? 6. **Are the actions taken appropriate to the magnitude of the issue of non-conformance?** 7. **Has the organization implemented a procedure to record any changes in the documented procedures resulting from corrective and preventive action?** (If yes – review)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

15.3 Recommended Audit Techniques

An audit of the organization's **Nonconformance and Corrective and Preventive Action** element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

15.3.1 Document Review

Document to Review	What to Look For	Why
EMS procedure dealing with nonconformance and corrective and preventive action	Does the procedure indicate who is responsible for investigating and handling instances of nonconformance? Does the procedure indicate that, if operational activities have to be amended as a result of a nonconformance, the changes must be documented?	Facilitates an assessment of conformance with the Standard requirement to develop a procedure to manage nonconformance. Facilitates an assessment of conformance with the Standard requirement to record required changes to procedures resulting from corrective or preventive actions.
EMS documentation dealing with nonconformance	Does the documentation indicate that the necessary actions to mitigate impacts as a result of the nonconformance were taken? Does the documentation indicate that actions to prevent the recurrence of the nonconformance were taken?	Facilitates an assessment of conformance with the Standard requirement to take appropriate mitigative actions.

15.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	Has a procedure been developed to ensure that nonconformance are investigated and corrected?	The Management Representative should answer "yes" to this question and indicate what the procedure is.
	Who is responsible for investigating incidents of nonconformance?	The Management Representative should identify the individual and this individual should be the same one named in the procedure.
	Does this person have the responsibility and the authority to take actions to mitigate possible impacts that could result from the nonconformance?	The Management Representative should answer "yes" to this question.
Person(s) identified in the EMS procedure as being responsible for investigating incidents of nonconformance	What is your role in investigating incidents of nonconformance?	Staff should describe their role as described in the EMS procedure. This should include taking action to mitigate adverse impacts, identifying appropriate corrective and/or preventive actions, and documenting required changes to procedures.

15.4 Common Exceptions

Commonly noted exceptions in the audit of **Nonconformance and Corrective and Preventive Action** are:

1. No one has the responsibility and authority to investigate and respond to incidents of nonconformance.
2. Procedures are changed as a result of corrective action but changes are not recorded.

15.5 Common Observations

Commonly noted observations in the audit of **Nonconformance and Corrective and Preventive Action** are:

1. Corrective and Preventive actions are not appropriate to the magnitude of the problem.

15.6 Practical Help

1. When you are auditing this element of an EMS, you must assure yourself that the organization has developed a procedure for investigating and correcting nonconformance, and that this procedure ensures that:

    1. the cause of the nonconformance is identified,
    2. the necessary and appropriate corrective actions are identified and implemented,
    3. new controls are implemented or existing ones modified to prevent the recurrence of the nonconformance, and,
    4. any required changes in written procedures are documented.

2. Depending on the potential adverse impacts that could result from nonconformance, the procedure(s) and documentation related to this element may be voluminous or quite simple. You will have to judge if the procedures in place are adequate to manage the particular environmental risks that the organization must manage.

CHAPTER 16 - CHECKING AND CORRECTIVE ACTION – RECORDS

16.1 WHAT THE ISO STANDARD REQUIRES

For **Records**, the ISO Standard specifies that:

- Procedures must be established and maintained for identification, maintenance and disposition of environmental records;
- Training records must be included;
- Results of audits and reviews must be included;
- Environmental records must be legible, identifiable and traceable to activity, product or service involved;
- Environmental records must be stored and maintained in such a way that they are readily retrievable & protected against damage, deterioration and loss;
- Retention times for environmental records must be established and recorded;
- Records must be maintained, as appropriate, to demonstrate conformance to the ISO Standard requirements.

The environmental records that support the EMS and provide proof that an EMS is actually working are the ones that have to be maintained in conformance with the requirements of the Standard. If there already is an effective records management system in place at the facility, it is most efficient if the environmental records management system is integrated with the existing system.

16.2 Questionnaire Protocol for Checking and Corrective Action – Records

Records (ISO Section 4.5.3)	Notes	WPR
1. **Has the organization developed and documented a system for identifying and maintaining environmental records?** (If yes – review) 2. **Do these records include:** • **personnel training records,** • **results of audits and reviews,** • information on applicable environmental laws and other requirement, • complaint records, • process information, • inspection, calibration and maintenance records, • pertinent contractor and supplier information, • incident reports, • information on emergency preparedness and response, • records of significant environmental impacts, • management reviews, 3. **Are the records readily retrievable by those who need them?** 4. **Are the records legible?** 5. **Are the records traceable to the activity to which they relate?** 6. **Are the records stored so that they are protected against damage, deterioration and/or loss?** 7. **Has the organization established and recorded retention times for the environmental records?** 8. **Have records been maintained, as appropriate, to demonstrate conformance with the ISO 14001 standard?**		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

16.3 Recommended Audit Techniques

An audit of the organization's **Records** element would entail:

1. Document review;
2. Interviews;
3. Visual observations.

Practical tips on each of these techniques are presented in the following tables.

6.3.1 Document Review

Document to Review	What to Look For	Why
EMS procedure dealing with records management	Does the procedure identify who is responsible for managing the environmental records?	Facilitates an assessment of conformance with the Standard requirement to develop a procedure to manage records.
	Does the procedure indicate the retention times for the environmental records?	Facilitates an assessment of conformance with the Standard requirement to establish and record retention times.
Environmental records	Are the records legible? Are the records traceable to the activity involved (e.g. is it clear from a review of hazardous wastes manifest that these records relate to the actual shipments of wastes from the facility)?	Facilitates an assessment of conformance with the Standard requirements that records be legible and traceable to activity, product, or service involved.
	Are training records and the results of audits and reviews included in the environmental records?	Facilitates an assessment of conformance with the Standard requirements to include training records and the results of audits and reviews.

16.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	Has a procedure been developed for records management?	The Management Representative should answer "yes" to this question and indicate what the procedure is.
	Who is responsible for managing environmental records?	The Management Representative should identify the individual and this individual should be the same one named in the procedure.
Person(s) identified in the EMS procedure as being responsible for managing records	What is your role in managing environmental records?	The individual should describe his/her role as described in the EMS procedure.
	How long are environmental records kept at this facility?	The individual should indicate the retention time that is defined in the EMS procedure.

16.3.3 VISUAL OBSERVATIONS

WHAT TO OBSERVE	SPECIFIC OBSERVATIONS	RELEVANCE TO AUDIT
Records storage area	Does the area provide protection for the stored records? Are the records stored there protected from damage, deterioration and loss?	Conformance with the Standard requirements to provide adequate storage for environmental records.
Condition of records	Are the records legible?	Conformance with the requirements of the Standard.
Your watch	The amount of time it takes to retrieve the requested environmental records.	Indicates the ease with which the records can be retrieved.

16.4 Common Exceptions

Commonly noted exceptions in the audit of **Records** are:

1. Records are not readily retrievable;
2. Records are either not available at all or they are incomplete.
3. Records are not traceable to the activity, product or service to which they relate;
4. Retention times are not specified.

16.5 Common Observations

Commonly noted observations in the audit of **Records** are:

1. Records are not stored in the appropriate files.

16.6 Practical Help

1. When you are auditing this element of an EMS, you must recognize that an effective records management system does not necessarily mean that all of the environmental records that an organization maintains are stored in the same place. Laboratory records, for example, may be kept in the lab; hazardous waste manifests may be kept in the warehouse, and the bulk of the environmental records kept in the Central Records File Room. This is an acceptable records management system provided that the EMS documentation identifies where these records are kept.
2. In order to test if the records are readily retrievable, you should make a list of several important environmental records (e.g. environmental training records, environmental audit reports), then proceed to the location where the EMS documentation indicates these records are stored and determine if they are there and if you can easily retrieve them. Alternatively, you could make a list of environmental records, give it to the person responsible for Records Management, and then wait to see how long it takes for that individual to bring you the appropriate records.
3. You should also pay careful attention to forms and check-sheets (e.g. inventory control forms for underground storage tanks, check lists for environmental audits, list of items to be included in an inspection of a waste storage area) which are used in conjunction with activities at a facility which could have significant environmental impacts. These are important environmental records and should be easily traceable to the related activity. They should be numbered and dated and the dates of revision clearly identified and filled out completely (no blanks are allowed).

CHAPTER 17 - CHECKING AND CORRECTIVE ACTION – ENVIRONMENTAL MANAGEMENT SYSTEM AUDIT

17.1 WHAT THE ISO STANDARD REQUIRES

For **Environmental Management System Audit**, the ISO Standard specifies that:

- Audits must be designed to determine whether the EMS conforms to plans for environmental management (including requirements of the Standard) and whether the EMS has been properly implemented and maintained;
- Information on the results of audits must be provided to Top Management;
- The EMS audit program and schedule must be based on the environmental importance of the activity concerned and the results of previous audits;
- Audit procedures must include:

    - the audit scope,
    - frequency and methodologies,
    - responsibilities and requirements for conducting audits,
    - responsibilities and requirements for reporting results.

Other important issues must be considered when evaluating the Environmental Management System Audit element in an EMS. The organization will determine how often the EMS audits will be undertaken. The schedule is usually linked to the Management Review cycle that is typically on an annual basis. There is no requirement to audit annually. The audit schedule should be determined based on the environmental importance of the activities involved and the decision of Top Management on how often management needs to have an objective assessment of the EMS. This audit activity should be linked to the Nonconformance and Corrective and Preventive Action element in the EMS, as nonconformance identified in an EMS audit should be dealt with in the same manner as other nonconformance in the system.

17.2 QUESTIONNAIRE PROTOCOL FOR CHECKING AND CORRECTIVE ACTION – ENVIRONMENTAL MANAGEMENT SYSTEM AUDIT

ENVIRONMENTAL MANAGEMENT AUDIT (ISO SECTION 4.5.4)	Notes	WPR
1. **Has the organization developed an audit program to periodically evaluate its EMS?** 2. Is the program documented? (If yes - review) 3. **Has the audit program been designed to:** • **determine whether the EMS conforms to the plans for environmental management within the organization,** • **determine whether the EMS conforms to the ISO 14001 standard,** • **determine whether the EMS has been properly implemented and maintained,** • **provide information on the results of the audit to management.** 4. **Does the program include:** • **the activities and areas to be covered in the audits (i.e. scope),** • **the frequency of the audits,** • **the audit methodologies,** • **the responsibilities of organization personnel in managing and conducting the audits,** • **the communication of audit findings,** • auditor competence. 5. Is a plan for dealing with non-conformance developed? How is its implementation ensured?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

17.3 Recommended Audit Techniques

An audit of the organization's EMS Audit element would entail:

1. Document review;
2. Interviews .

Practical tips on each of these techniques are presented in the following tables.

17.3.1 Document Review

Document to Review	What to Look For	Why
EMS procedure dealing with EMS Audits	Does the procedure identify who is responsible for managing the EMS Audits?	Facilitates an assessment of conformance with the Standard.
	Does the procedure specify the required elements of the audit program, including schedule, scope, frequency, methodologies, responsibilities and reporting?	Facilitates an assessment of conformance with the Standard.
Environmental audit reports	Do the reports indicate that the EMS audit procedure was effectively implemented?	Facilitates an assessment of how effectively the organization implements its own procedures.
	Is there an action plan to address the nonconformance identified in the audit?	Facilitates an assessment of how the organization manages nonconformance in the EMS.

17.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	Has a procedure been developed for conducting EMS audits?	The Management Representative should answer "yes" to this question and indicate what the procedure is.
	Is Top Management advised of the results of the EMS Audits? How?	The Management Representative should answer "yes" to this question and specify how the results are communicated to the management at the facility.
Top Management (Manager/Director)	Is there a procedure for periodically auditing the EMS at this facility?	The Manager should answer "yes" to this question and indicate what the procedure is.
	Why are EMS audits conducted at this facility?	The Manager should indicate that EMS Audits are undertaken to determine if the EMS conforms to the Standard; if the EMS is effectively serving the needs of the organization; if the EMS has been adequately implemented and maintained, and if the EMS can be improved.
	Are you aware of the results of EMS audits?	The Manager should answer "yes" to this question and indicate the procedure used by the Management Representative to communicate the audit results.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
	How do you make use of the EMS audit results?	The Manager should indicate that the EMS audit results are assessed on a regular basis and used by management in their consideration of whether the EMS needs to be changed; whether the EMS continues to be appropriate for the facility, and whether the EMS supports continual improvement.

17.4 COMMON EXCEPTIONS

Commonly noted exceptions in the audit of **Environmental Management System Audit** are:

1. The audit program does not include a schedule.
2. Action plans have been developed but no verification of corrective and/or preventive actions related to internal audits, or under 4.5.2., have been conducted and/or documented.

17.5 COMMON OBSERVATIONS

Commonly noted observations in the audit of **Environmental Management System Audit** are:

1. No Action Plan has been prepared to deal with nonconformance identified in the audit.

17.6 PRACTICAL HELP

1. The ISO Standard requires EMS audits to be conducted according to a schedule which is specified by the organization itself. The Standard does not dictate the audit schedule but requires the organization to specify the frequency of audits based on the environmental importance of the activities involved. It is not your job to determine the audit frequency, but to decide if the frequency specified by the organization is appropriate.
2. Also, the ISO Standard does not specify that the EMS audits must be conducted by outside Auditors. An organization is free to use internal Auditors provided they are impartial, objective and qualified. The auditing program developed by the organization should therefore include an item addressing Auditor competence.

CHAPTER 18 - MANAGEMENT REVIEW

18.1 WHAT THE ISO STANDARD REQUIRES

For **Management Review**, the ISO Standard specifies that:

- The EMS must be reviewed by Top Management, at intervals that it determines, to ensure the continuing suitability, adequacy and effectiveness of the EMS (in light of audit results, changing circumstances, and commitment to continual improvement);
- The necessary information must be collected to allow management to carry out this evaluation;
- The Management Review must be documented;
- The possible need for changes to the policy, objectives and other EMS elements must be addressed in light of EMS audit, any changes in circumstances and in view of the commitment to continual improvement.

As with EMS Audits, the organization will determine how often the Management Review will be undertaken. It is also not a requirement that every element of the EMS be reviewed at one time. Therefore, the Management Review may take place over a period of time. In reviewing its EMS, the facility management will consider a number of issues and will make a number of decisions. All of these deliberations must be recorded.

18.2 QUESTIONNAIRE PROTOCOL FOR MANAGEMENT REVIEW

MANAGEMENT REVIEW (ISO SECTION 4.6)	Notes	WPR
1. **Does the organization's top management periodically review the EMS?** 2. Has a Management Review procedure been established and documented? (If yes – review) 3. Has the review period been established? (If yes - what is it?) 4. **Does the process ensure that the necessary information to conduct a review is collected and provided to management?** 5. Does the review process include: • results from audits, • the extent to which objectives and targets have been met, • the continuing suitability of the EMS in relation to changes in legislation, expectations and requirements of other interested parties, activities at the facility, advances in technology, lessons learned from environmental incidents, market changes, feedback from reporting and communication, etc., • concerns from relevant interested parties (such as government regulators, top management, etc.). 6. **Is the review documented?** (If yes - review) 7. **Does the review address the possible need for changes in the EMS in light of a review of the audit results, changing circumstances at the facility and the commitment to continual improvement?**		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

18.3 Recommended Audit Techniques

An audit of the organization's Management Review element would entail:

1. Document review;
2. Interviews.

Practical tips on each of these techniques are presented in the following tables.

18.3.1 Document Review

Document to Review	What to Look For	Why
EMS procedure dealing with Management Review	Does the procedure include the frequency of management reviews? Does the procedure indicate the reasons for the Management Review? Does the procedure specify the type of information that needs to be compiled for the Management Review?	Facilitates an assessment of conformance with the Standard.
Management Review Minutes (or the information recorded at the Management Review meeting)	Do the minutes indicate that facility management considered the possible need for changes to the environmental policy? Do the minutes indicate that facility management considered the possible need for changes to the environmental objectives? Do the minutes indicate that facility management considered the possible need for changes to other elements of the EMS? Do the minutes indicate that facility management considers that the EMS continues to be suitable?	Facilitates an assessment of how effectively the organization implements its own procedures. Facilitates an assessment of how the organization manages nonconformance in the EMS.

18.3.2 INTERVIEWS

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Management Representative	Has a procedure been developed for conducting Management Reviews?	The Management Representative should answer "yes" to this question and indicate what the procedure is.
	What kind of information is compiled for management to review in its Management Review.	The Management Representative should indicate that the following types of information are compiled: the results of audits; the extent to which objectives and targets have been met; concerns of relevant interested parties; post-mortems from any environmental emergency events; any changes in activities, products or services; any changes in environmental legislation.
Managers	Is there a procedure for a Management Review of the EMS?	The Manager should answer "yes" to this question and indicate what the procedure is.
	What types of information are discussed in the Management Review?	The Manager should indicate that the Management Review considers the results from audits; the extent to which objectives and targets have been met; changing circumstances; concerns of interested parties, etc.

WHO TO INTERVIEW	WHAT TO ASK	WHAT TO LOOK FOR IN ANSWERS
Managers	What are the major items addressed in the Management Review?	The Manager should indicate that the basic purpose of the Management Review is to determine if the EMS continues to be adequate and effective, and if any changes to the environmental policy, objectives or other EMS elements are necessary.

18.4 COMMON EXCEPTIONS

Commonly noted exceptions in the audit of **Management Review** are:

1. A Management Review of the EMS has not been completed.
2. The documentation on the Management Review does not include a statement on the Management's decision with respect to the continuing adequacy and effectiveness of the EMS.

18.5 COMMON OBSERVATIONS

Commonly noted observations in the audit of **Management Review** are:

1. The views of relevant interested parties are not considered in the Management Review.
2. Lessons learned from environmental accidents are not considered in the Management Review.

18.6 PRACTICAL HELP

1. An EMS is not mature until one full cycle has been completed, which includes a Management Review. You should therefore be aware of the fact that an EMS does not meet the requirements of the ISO Standard until a Management Review has been undertaken and documented.
2. The Standard indicates that the management at a facility is responsible for determining the frequency of the Management Review. You must assess whether the specified interval between reviews is appropriate, based on the environmental aspects at the facility and the complexity of the system.

CHAPTER 19 – GENERAL REQUIREMENTS

19.1 WHAT THE ISO STANDARD REQUIRES

For General Requirements, the ISO Standard requires that:

- An organization shall establish and maintain an environmental management system.

To successfully assess conformance with this element of the ISO Standard, you will have to have completed all of the activities described in Chapters 2 through 18. It is the first auditable element presented in the Standard but it cannot be assessed until the end of the audit.

19.2 QUESTIONNAIRE PROTOCOL FOR GENERAL REQUIREMENTS

GENERAL REQUIREMENTS (ISO SECTION 4.1)	Notes	WPR
1. **Has the organization established and maintained an environmental management system (as per the requirements presented in Clause 4 of the ISO 14001 Standard)?**		

(*) Note: A " NO" response to this question would constitute an audit exception.

APPENDIX – EMS PROTOCOL

ENVIRONMENTAL POLICY (ISO SECTION 4.2)	Notes	WPR
1. **Does the facility have an environmental policy that is relevant to its activities?** 2. **Is it written?** (If yes, review) 3. Does the policy reflect facility's values and guiding principles? 4. Has Top Management approved the policy? 5. Has facility management identified, approved and given authority to someone to oversee and implement the policy? 6. **Does the policy guide the setting of environmental objectives and targets?** 7. Does the policy guide facility toward appropriate technology and management practices? 8. **In the policy, is there a commitment to:** • **Continual improvement;** • **Prevention of pollution;** • Monitoring; • **Meeting or exceeding legal requirements;** • **Meeting or exceeding other environmental requirements;** • Consideration of the expectations of interested parties. 9. Is the policy signed by the Director of facility? 10. Are resources necessary to implement the policy identified and committed? (How?) 11. Is the policy dated? 12. Does the policy contain a current version number? 13. **Is the policy effectively communicated to staff?** (How?) 14. **Is the policy available to the public?** 15. Is the policy effectively communicated to the public? (How?) 16. Is the policy regularly reviewed? (by whom?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

ENVIRONMENTAL ASPECTS (ISO REFERENCE S. 4.3.1)	Notes	WPR
1. **Has the facility established a procedure to identify the environmental aspects of its activities, products and services that it can control and over which it has an influence?** 2. Does this process include a listing of activities, products and services that may affect the environment? 3. Does the list include: • hazardous material management, • solid waste management, • hazardous waste management, • effluent discharges related to power generation, • sanitary sewage discharges, • landfills, • transportation, • fugitive emissions, • air emissions from stacks, • noise emissions, • odours from the plant , • environmental emergencies, and, • others (specify). 4. Does the process include a listing of all existing monitoring programs associated with each of the activities, products and/or services that may affect the environment? 5. Are these monitoring programs adequate to identify the environmental impacts of the activities, products and/or services? 6. Have these impacts been quantified and documented in terms of: • the scale of the impact, • the severity of the impact, • the probability of occurrence • the duration of impact. 7. **Does the facility have a definition of what is "significant" in terms of environmental impact?** (What is it and is it documented?)		

	Notes	WPR
8. What are the significant environmental impacts associated with the activities, products and/or services? 9. Are these significant impacts documented? (If yes, review) 10. Does the process identify potential upset/spill/emergency conditions associated with the activities, products and/or services? 11. Are there reports/evaluations that describe impacts of these upset conditions? 12. Have these impacts been quantified and documented in terms of: • the scale of the impact • the severity of the impact • the probability of occurrence • the duration of impact **14. Is this process adequate to identify the environmental aspects of the facility operation and the evaluation of potential environmental impacts?** **15. Has the facility developed a process to ensure that the aspects related to any potentially significant environmental impacts are considered in setting its environmental objectives?** **16. Is there a process for keeping all of this information on environmental aspects and impacts current?** 17. Are all these procedures documented? (If yes, review)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

LEGAL AND OTHER REQUIREMENTS (ISO SECTION 4.3.2)	Notes	WPR
1. **Has the organization established a procedure to identify which environmental laws and regulations apply to its operations?** 2. **Has the organization established a procedure to identify other mandatory government requirements (such as permits and certificates of approval)?** 3. Is this procedure written? (If yes, review) 4. Does this procedure ensure that any new requirements are identified in a timely fashion? (How?) 5. Have the personnel within the organization who need to be aware of information on legal requirements (i.e. those within the organization who need this information in order to keep the facility in regulatory conformance) been identified? 6. **Is the information on legal requirements provided to all those personnel who need to know in a timely manner?** (How?) 7. Is the information on legal requirements provided to others (such as construction crews, contractors) on a case-by-case basis? 8. Are there other requirements to which the organization must comply ? 9. How are these other requirements identified? 10. How are these other requirements updated? 11. Is this procedure written? (If yes, review) 12. **Is the information on other requirements communicated to those personnel who need to know this information (i.e. those within the organization who need this information in order to keep the facility in conformance)?** (How?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

OBJECTIVES AND TARGETS (ISO SECTION 4.3.3)	Notes	WPR
1. **Have specific environmental objectives and targets been established at this facility?** 2. **Are these environmental objectives and targets specific to different departments/ divisions/sections/operating units of the organization?** 3. **Are these written**? (if yes – review) 4. Do these environmental objectives deal with: • Hazardous material management, • Solid waste management, • Hazardous waste management, • Liquid effluent discharges, • Sanitary sewage discharges, • Landfills, • Transportation, • Fugitive emissions, • Air emissions from stacks, • Noise emissions, • Odours from the facility, • Environmental emergencies, • Environmental inspections and audits, • Communications, • Energy consumption, • Others (specify). 5. **In setting its environmental objectives has the organization considered:** • **Its legal requirements** • **Its other relevant requirements** • **Its technological options** • **Its financial requirements** • **Its business requirements** • **Its operational requirements** 6. **Do the environmental objectives reflect the commitments in the environmental policy?** 7. **Do the objectives and targets reflect a commitment to prevention of pollution?** (How?) 8. **Do the environmental objectives reflect what has been identified as the significant environmental impact of the organization's activities?**		

	Notes	WPR
9. Have specific and measurable targets been established for each of the environmental objectives? (SMARTT - specific, measurable, action-oriented, realistic, time based, timely). Have they been documented? 10. Have the employees at this facility that have responsibility for ensuring the objectives are met had input into developing the objectives? (How?) 11. Has the organization defined those individuals and groups "concerned with or affected by " its environmental performance (e.g. neighbours, community groups, environmental groups, government regulators, employees, First Nations, the media etc)? 12. **Have the views of the individuals and groups identified in point 11 above been considered in the development of the environmental objectives?** (How?) 13. Are the environmental objectives regularly reviewed? (How often and how?) 14. Are the environmental objectives revised to reflect any necessary and/or desired improvements in environmental performance at this facility? (How?) 15. Is this process for review and revision of environmental objectives written? (if yes – review) 16. **Are the objectives and targets consistent with the environmental policy and the commitment to "continual improvement" and prevention of pollution?**		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

ENVIRONMENTAL MANAGEMENT PROGRAM (ISO SECTION 4.3.4)	Notes	WPR
1. Has the organization established a planning process to ensure that its environmental objectives and targets are achieved? 2. Is this process documented? (if yes – review) 3. **Does the planning result in the establishment of specific programs to achieve each of the environmental objectives and targets?** 4. Do these programs relate specifically to the commitments in the environmental policy? 5. **Do these programs identify who is responsible for achieving each environmental objective and target?** 6. **Do these programs identify specifically what is to be done to achieve each environmental objective and target?** 7. **Do these programs specify the time frame in which each environmental objective and target is to be met?** 8. **Is this planning process and the establishment of programs to achieve environmental objectives and targets applied to new developments at the facility (such as new construction, changes in process, etc.)?** 9. Does the facility management review progress on the EMPs? How?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

STRUCTURE AND RESPONSIBILITY (ISO SECTION 4.4.1)	Notes	WPR
1. **Has the organization appointed an individual (from Management) with responsibility for ensuring that the requirements of the EMS are met and reporting on the performance of the EMS to Management?** 2. Does this individual prepare the action plan to implement the EMS? 3. Does this action plan include budget estimates and environmental objectives? 4. Does the action plan assign components of the EMS to other members of the organization? 5. Does the Management Representative regularly monitor the effectiveness of the EMS? (How?) 6. Are the results of this review documented? (if yes – review) 7. **Does the Management Representative report regularly to senior management on environmental performance?** 8. Has the organization identified the relationships between environmental, health and safety and risk (loss prevention) issues? 9. Has an organizational chart been prepared which identifies all individuals and their responsibility for environmental issues? (if yes - review) 10. Is there a clear "chain of command" with respect to environmental responsibilities and are all employees with environmental responsibilities aware of this "chain of command"? 11 Are these responsibilities defined and documented in job descriptions or in procedures? (if yes – review) 12. Are environmental responsibilities defined and documented in any relevant Policy and Procedures? (if yes – review) 13. **Are environmental Responsibilities adequately defined and documented?** 14. **Are personnel who have environmental Responsibilities aware of these Responsibilities?** 15. Have the resources required to implement the EMS been identified? How?		

	Notes	WPR
16. **Have the resources required to implement the EMS been provided?** (Check budgets.) 17. Does the organization monitor the costs of its environmental activities? (How?) 18. Does the organization monitor the benefits of its environmental activities? (How?) 19. Are these activities (monitoring the costs and benefits) documented? (If yes - review) 20. Are the resources provided adequate for the implementation of the EMS?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

TRAINING, AWARENESS & COMPETENCE (ISO SECTION 4.4.2)	Notes	WPR
1. **Does the organization have a process to identify environmental training needs of employees and has it identified those training needs?** 2. Does the organization have a training plan to address these training needs? 3. Is there documentation on the environmental training received by the organization employees? (if yes - review) *Note: Make sure this includes ALL appropriate training records.* 4. **Have all employees whose work may create a significant environmental impact received appropriate training?** 5. **Is there awareness training which includes:** • **the details of the environmental policy and the requirements of the EMS,** • **the importance of conformance with the environmental policy and with the requirements of the EMS,** • **the significant environmental impacts, actual or potential, of individual's work activities,** • **the specific roles and responsibilities of individuals in achieving conformance with the environmental policy and the EMS,** • **specific emergency response procedures;** • **the consequences of departure from operating procedures.** 6. **Are employees whose functions may create a significant environmental impact competent on the basis of appropriate education, training and/or experience?** 7. How is this competence determined?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

COMMUNICATION (ISO SECTION 4.4.3)	Notes	WPR
1. **Is there a procedure in place to communicate information on environmental performance between different levels of the organization?**		
2. Is the procedure documented? (If yes, review.)		
3. Has the organization established a process for receiving and responding to employee concerns? (What is it?)		
4. Is the internal communication adequate to support continual improvement?		
5. Are the objectives and targets communicated to appropriate staff?		
6. Have deadlines for meeting the objectives and targets been specified and communicated to appropriate staff		
7. Have written Standard Operating Procedures explaining each action been distributed to the appropriate staff		
8. **Is there a process for receiving, recording and responding to concerns/complaints from other interested parties? (What is it?)**		
9. Is the process documented? (If yes, review).		
10. Is there a process for externally communicating information: • on management commitment to the environment, • on environmental aspects of the organization's activities, • to raise awareness of the organization's, • environmental policies, objectives, targets and programs, • the organization's environmental management system and performance.		
11. Is the process documented? (If yes, review).		
12. **Has the organization considered processes for external communication on its significant environmental aspects and has this decision been recorded?** (If yes, review).		
13. Is this process documented? (If yes, review).		
14. Is there a documented process in place to communicate with government authorities on the organization's environmental management system and performance? (What is it?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

DOCUMENTATION (ISO SECTION 4.4.4)	Notes	WPR
1. **Is there documentation that describes the core elements of the environmental management system?** (If yes – review) 2. Does this documentation include: • corporate direction (policy, objectives and targets), • roles and responsibilities, • reporting system at the organization including the internal and external reports which are to be generated and a format for such reports. These reports may include monthly reports, quarterly reports, environmental reports, regulatory reports, incident reports, etc., • process summaries (flow charts, release points at the facility) and approvals (permits), • pertinent legislation and overview of regulatory requirements, • general policies and procedures, • standard operating procedures for pollution control equipment, • references. 3. **Does the documentation provide reference to other related documentation?** 4. Is this documentation integrated with existing systems such as health & safety, loss prevention, purchasing, etc.? (How?) 5. Is the style of writing easy to understand? 6. Have personnel been involved in the development of the EMS documentation, particularly the SOPs? 7. Has there been a training seminar to introduce the EMS documentation? 8. Is there a process to distribute the EMS manual to appropriate personnel? (What is it?) 9. Does the documentation support employee awareness of what is required of them?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

DOCUMENT CONTROL (ISO SECTION 4.4.5)	Notes	WPR
1. **Are there procedures in place to ensure that all documents related to the EMS can be readily located?** (What are they?) 2. **Are the documents dated, with dates of revision?** 3. **Are the documents legible?** 4. **Are the documents readily identifiable as being related to the EMS?** 5. **Are the documents retained for a specific period of time?** (How long?) 6. **Are the documents periodically reviewed and revised as necessary?** (How?) 7. **Are the current versions of all documents available at the locations where they are needed?** 8. **Are all obsolete documents removed?** 9. **Are obsolete documents retained for legal and/or knowledge purposes suitably identified?** (How?) 10. Is there an individual responsible for collection of appropriate information for each of the documents? (Who is it?) 11. **Is there a process for review of each of the documents prior to distribution?** 12. Is there a process to maintain confidentiality and distribution (who gets copies of the documents)? (What is it?) 13. Is there a process for dealing with draft documents and supporting documentation? 14. Is the document control at the organization adequate, i.e.: • does the organization have the environmental information it needs to manage environmental issues effectively? • does the organization have a document control system that makes information available to the people who need it when they need it?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

OPERATIONAL CONTROL (ISO SECTION 4.4.6)	Notes	WPR
1. **Has the organization identified and documented those operations and activities associated with the significant environmental aspects?**		
2. **Has the organization identified and documented those operational controls for those activities (# 1) which if not properly implemented could result in a deviation from the policy, objectives and targets?**		
3. **Has the organization established and documented procedures to ensure these operational activities are properly carried out** (e.g. plant operating instructions, plant operating procedures, etc.)**?**		
4. **Has the organization established and documented procedures related to the significant environmental aspects of the goods and services it uses** (e.g. purchases from outside suppliers and contractors)**?**		
5. **Has the organization communicated these procedures to suppliers and contractors?** (How?)		
6. Does the organization ensure that its suppliers and contractors follow these procedures? (How?)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

EMERGENCY PREPAREDNESS & RESPONSE (ISO SECTION 4.4.7)	Notes	WPR
1. **Has the organization identified and documented the potential for adverse environmental impacts as a result of emergency operating conditions?** 2. **Has the organization identified and documented the potential for adverse environmental impacts as a result of accidents?** 3. **Has the organization developed an emergency response plan** which includes: • the emergency organization, • key personnel and their responsibilities, • details of available emergency services, • internal and external communication plans, • actions to be taken in the event of different types of emergency situations, • information on hazardous materials stored at the organization, • information on the potential environmental impact of materials stored at the facility, • training requirements, • testing requirements. 4. **Is there a documented procedure in place to review and revise the emergency response plan, particularly after an incident? (Look for revisions/updates)** 5. **Has the organization tested the emergency response plan? (Verify)** 6. Is there adequately trained staff at the organization to implement the emergency response plan? 7. Is the emergency response plan documented? (If yes - review) 8. Are copies of the plan accessible to those personnel who are named as responders? 9. Does everyone named in the plan know that he/she is named and his/her responsibilities?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

MONITORING AND MEASUREMENT (ISO SECTION 4.5.1)	Notes	WPR
1. Has the organization identified appropriate performance indicators that relate to its objectives and targets (see environmental objectives and targets)? (e.g. quantity of wastes produced, efficiency of energy use, percentage waste recycled, specific pollutant quantities, number of spills, etc.) 2. **Is there a process in place to monitor progress with respect to the performance indicators?** 3. **Has the organization established documented procedures to monitor and measure on a regular basis the key characteristics of its operations and activities that can have a significant impact on the environment** (how often)**?** (refer to the significant environmental aspects) 4. Do these procedures include the recording of information on: • Environmental performance • Relevant operational controls • Conformance with the organization's environmental objectives and targets 5. **Are there procedures in place to maintain sample measuring and monitoring equipment?** 6. **Are these procedures documented?** (If yes – review) 7. **Is this equipment calibrated?** (If yes - how often?) 8. **Are records of the equipment calibration kept?** (If yes – review) 9. **Does the organization have a system in place to evaluate conformance with appropriate environmental regulations?** 10. Is this system documented? (If yes - review)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

NON CONFORMANCE AND CORRECTIVE AND PREVENTIVE ACTION (ISO SECTION 4.5.2)	Notes	WPR
1. **Has the organization developed procedures to identify and document incidents of non-conformance and/or deficiencies in the EMS, such as objectives and targets missed, incidents and accidents, ineffective procedures?** 2. **Does one individual have responsibility and authority for documenting and investigating incidents of non-conformance?** (Who is it?) 3. **Does that individual have responsibility to take action to mitigate impacts?** 4. **Does the procedure ensure that the following items are addressed:** • **identifying the cause of the non-conformance,** • **identifying the necessary corrective action** • **implementing the necessary corrective action,** • **developing new and/or modifying existing controls necessary to avoid repetition of the non-conformance,** • **recording any changes in written procedures resulting from any corrective actions taken.** 5. Is there a documented follow-up procedure to ensure that the corrective actions have been implemented and are effective? 6. **Are the actions taken appropriate to the magnitude of the issue of non-conformance?** 7. **Has the organization implemented a procedure to record any changes in the documented procedures resulting from corrective and preventive action?** (If yes – review)		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

RECORDS (ISO SECTION 4.5.3)	Notes	WPR
1. **Has the organization developed and documented a system for identifying and maintaining environmental records?** (If yes – review) 2. **Do these records include:** • **personnel training records,** • **results of audits and reviews,** • information on applicable environmental laws and other requirement, • complaint records, • process information, • inspection, calibration and maintenance records, • pertinent contractor and supplier information, • incident reports, • information on emergency preparedness and response, • records of significant environmental impacts, • management reviews, 3. **Are the records readily retrievable by those who need them?** 4. **Are the records legible?** 5. **Are the records traceable to the activity to which they relate?** 6. **Are the records stored so that they are protected against damage, deterioration and/or loss?** 7. **Has the organization established and recorded retention times for the environmental records?** 8. **Have records been maintained, as appropriate, to demonstrate conformance with the ISO 14001 standard?**		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

ENVIRONMENTAL MANAGEMENT AUDIT (ISO SECTION 4.5.4)	Notes	WPR
1. **Has the organization developed an audit program to periodically evaluate its EMS?** 2. Is the program documented? (If yes - review) 3. **Has the audit program been designed to:** • **determine whether the EMS conforms to the plans for environmental management within the organization,** • **determine whether the EMS conforms to the ISO 14001 standard,** • **determine whether the EMS has been properly implemented and maintained,** • **provide information on the results of the audit to management.** 4. **Does the program include:** • **the activities and areas to be covered in the audits (i.e. scope),** • **the frequency of the audits,** • **the audit methodologies,** • **the responsibilities of organization personnel in managing and conducting the audits,** • **the communication of audit findings,** • auditor competence. 5. Is a plan for dealing with non-conformance developed? How is its implementation ensured?		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

MANAGEMENT REVIEW (ISO SECTION 4.6)	Notes	WPR
1. **Does the organization's top management periodically review the EMS?** 2. Has a Management Review procedure been established and documented? (If yes – review) 3. Has the review period been established? (If yes - what is it?) 4. **Does the process ensure that the necessary information to conduct a review is collected and provided to management?** 5. Does the review process include: • results from audits, • the extent to which objectives and targets have been met, • the continuing suitability of the EMS in relation to changes in legislation, expectations and requirements of other interested parties, activities at the facility, advances in technology, lessons learned from environmental incidents, market changes, feedback from reporting and communication, etc., • concerns from relevant interested parties (such as government regulators, top management, etc.). 6. **Is the review documented?** (If yes - review) 7. **Does the review address the possible need for changes in the EMS in light of a review of the audit results, changing circumstances at the facility and the commitment to continual improvement?**		

(*) Note: A " NO" response to any of the questions that are bolded would constitute an audit exception. The other questions are there to aid in the Auditor's understanding of how these issues are managed.

GENERAL REQUIREMENTS (ISO SECTION 4.1)	Notes	WPR
1. **Has the organization established and maintained an environmental management system (as per the requirements presented in Clause 4 of the ISO 14001 Standard)?**		

(*) Note: A " NO" response to this question would constitute an audit exception.

The printing processes used in producing this document conform to environmental performance standards established by the Government of Canada under Canada's *National Guidelines on Lithographic Printing Services*. These standards aim to ensure the environmental integrity of printing processes through reductions in toxic emissions to the environment, reductions in loading of wastewater, reductions in the quantity of materials sent to landfills, and the implementation of resource conservation procedures.

The paper used in the interior of this document conforms to Canada's *National Printing and Writing Paper Guideline* and/or *Uncoated Mechanical Printing Paper Guideline*. These guidelines set environmental performance standards for fibre-use efficiency, chemical oxygen demand, energy use, global warming potential, acidification potential, and solid waste.

The printing processes and the paper used in the interior of this document are fully certified under Canada's sole ecolabelling program – the **Environmental Choice^{M} Program** (ECP). The Program's official symbol of certification – the **EcoLogo^{M}** – features three stylized doves intertwined to form a maple leaf, representing consumers, industry and government working together to improve Canada's environment.

For more information about the **Environmental Choice^{M} Program**, please visit the ECP website at **www.environmentalchoice.com** or telephone (613) 247-1900.

Environment Canada's Technology Outreach Section is proud to support environmental and quality performance standards, and the use of **Environmental Choice^{M}** certified papers and environmentally responsible products and printing processes, throughout its development and distribution of information products. To obtain a copy of the catalogue *Environment Canada: Selected Publications and Websites*, please contact us toll-free at 1 800 734-3232, or (819) 953-5750; by facsimile at (819) 994-5629; or by e-mail at **epspubs@ec.gc.ca**. For additional information on Environment Canada, visit the departmental website at **www.ec.gc.ca**.